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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 170816769-8162-02]

RIN 0648-XF633

Fisheries of the Exclusive Economic Zone Off Alaska; Gulf of Alaska; Final 2018 and 2019

Harvest Specifications for Groundfish

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule; harvest specifications and closures.

SUMMARY: NMFS announces final 2018 and 2019 harvest specifications, apportionments, and Pacific halibut prohibited species catch limits for the groundfish fishery of the Gulf of Alaska (GOA). This action is necessary to establish harvest limits for groundfish during the 2018 and 2019 fishing years and to accomplish the goals and objectives of the Fishery Management Plan for Groundfish of the Gulf of Alaska. The intended effect of this action is to conserve and manage the groundfish resources in the GOA in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

DATES: Harvest specifications and closures are effective at 1200 hours, Alaska local time (A.l.t.), *[Insert date of publication in the FEDERAL REGISTER]*, through 2400 hours, A.l.t., December 31, 2019.

ADDRESSES: Electronic copies of the Final Alaska Groundfish Harvest Specifications Environmental Impact Statement (EIS), Record of Decision (ROD), the Supplementary Information Report (SIR) to the EIS, and the Initial Regulatory Flexibility Analysis (IRFA) prepared for this action are available from <http://alaskafisheries.noaa.gov>. The final 2017 Stock Assessment and Fishery Evaluation (SAFE) report for the groundfish resources of the GOA, dated November 2017, is available from the North Pacific Fishery Management Council (Council) at 605 West 4th Avenue, Suite 306, Anchorage, AK 99510-2252, phone 907-271-2809, or from the Council's Web site at <http://www.npfmc.org>.

FOR FURTHER INFORMATION CONTACT: Obren Davis, 907-586-7228.

SUPPLEMENTARY INFORMATION: NMFS manages the GOA groundfish fisheries in the exclusive economic zone of the GOA under the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP). The Council prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 *et seq.* Regulations governing U.S. fisheries and implementing the FMP appear at 50 CFR parts 600, 679, and 680.

The FMP and its implementing regulations require NMFS, after consultation with the Council, to specify the total allowable catch (TAC) for each target species, the sum of which must be within the optimum yield (OY) range of 116,000 to 800,000 metric tons (mt) (50 CFR 679.20(a)(1)(i)(B)). Section 679.20(c)(1) further requires NMFS to publish and solicit public comment on proposed annual TACs and apportionments thereof, Pacific halibut prohibited species catch (PSC) limits, and seasonal allowances of pollock and Pacific cod. Upon consideration of public comment received under § 679.20(c)(1), NMFS must publish notice of final harvest specifications for up to two fishing years as annual TACs and apportionments, Pacific halibut PSC limits, and seasonal allowances of pollock and Pacific cod, per §

679.20(c)(3)(ii). The final harvest specifications set forth in Tables 1 through 30 of this rule reflect the outcome of this process, as required at § 679.20(c).

The proposed 2018 and 2019 harvest specifications for groundfish of the GOA and Pacific halibut PSC limits were published in the *Federal Register* on December 8, 2017 (82 FR 57924). Comments were invited and accepted through January 8, 2018. NMFS received two letters of comment on the proposed harvest specifications; the comments are summarized and responded to in the “Response to Comments” section of this rule. In December 2017, NMFS consulted with the Council regarding the 2018 and 2019 harvest specifications. After considering public testimony, as well as biological and socioeconomic data that were available at the Council’s December 2017 meeting, NMFS is implementing the final 2018 and 2019 harvest specifications, as recommended by the Council. For 2018, the sum of the TAC amounts is 427,512 mt. For 2019, the sum of the TAC amounts is 376,417 mt.

Other Actions Potentially Affecting the 2018 and 2019 Harvest Specifications

Amendment 106: Reclassify Squid as an Ecosystem Species

In June 2017, the Council recommended for Secretarial review Amendment 106 to the FMP. Amendment 106 would reclassify squid in the FMP as an “Ecosystem Component Species,” which is a category of non-target species that are not in need of conservation and management. Currently, NMFS annually sets an Overfishing Level (OFL), Acceptable Biological Catch (ABC), and TAC for squid in the GOA groundfish harvest specifications. Under Amendment 106, OFL, ABC, and TAC specifications would no longer be required. Proposed regulations to implement Amendment 106 would prohibit directed fishing for squid, require recordkeeping and reporting to monitor and report catch of squid species annually, and establish a squid maximum retainable amount when directed fishing for groundfish species at 20

percent to discourage retention, while allowing flexibility to prosecute groundfish fisheries. Further details will be available on publication of the proposed rule for Amendment 106. If Amendment 106 and its implementing regulations are approved by the Secretary of Commerce, Amendment 106 and its implementing regulations are anticipated to be effective by 2019. Until Amendment 106 is effective, NMFS will continue to publish OFLs, ABCs, and TACs for squid in the GOA groundfish harvest specifications.

ABC and TAC Specifications

In December 2017, the Council, its Advisory Panel (AP), and its Scientific and Statistical Committee (SSC) reviewed the most recent biological and harvest information about the condition of groundfish stocks in the GOA. This information was compiled by the Council's GOA Groundfish Plan Team and was presented in the draft 2017 SAFE report for the GOA groundfish fisheries, dated November 2017 (see **ADDRESSES**). The SAFE report contains a review of the latest scientific analyses and estimates of each species' biomass and other biological parameters, as well as summaries of the available information on the GOA ecosystem and the economic condition of the groundfish fisheries off Alaska. From these data and analyses, the Plan Team recommends an OFL and ABC for each species or species group. The 2017 SAFE report was made available for public review during the public comment period for the proposed harvest specifications.

In previous years, the greatest changes from the proposed to the final harvest specifications have been based on recent NMFS stock surveys, which provide updated estimates of stock biomass and spatial distribution, and changes to the models used for producing stock assessments. At the November 2017 Plan Team meeting, NMFS scientists presented updated and new survey results, changes to stock assessment models, and accompanying stock assessment

estimates for groundfish species and species groups that are included in the final 2017 SAFE report per the stock assessment schedule found in the 2017 SAFE report introduction. The SSC reviewed this information at the December 2017 Council meeting. Changes from the proposed to the final 2018 and 2019 harvest specifications are discussed below.

The final 2018 and 2019 OFLs, ABCs, and TACs are based on the best available biological and socioeconomic information, including projected biomass trends, information on assumed distribution of stock biomass, and revised methods used to calculate stock biomass. The FMP specifies the formulas, or tiers, to be used to compute OFLs and ABCs. The formulas applicable to a particular stock or stock complex are determined by the level of reliable information available to fisheries scientists. This information is categorized into a successive series of six tiers to define OFL and ABC amounts, with Tier 1 representing the highest level of information quality available and Tier 6 representing the lowest level of information quality available. The Plan Team used the FMP tier structure to calculate OFL and ABC amounts for each groundfish species. The SSC adopted the final 2018 and 2019 OFLs and ABCs recommended by the Plan Team for all groundfish species. The Council adopted the SSC's OFL and ABC recommendations and the AP's TAC recommendations, with one exception for the arrowtooth flounder TAC, discussed below. The final TAC recommendations were based on the ABCs as adjusted for other biological and socioeconomic considerations, including maintaining the sum of all TACs within the required OY range of 116,000 to 800,000 mt.

The Council recommended 2018 and 2019 TACs that are equal to ABCs for pollock in the Southeast Outside (SEO) District, sablefish, shallow-water flatfish in the Central GOA and the West Yakutat and SEO Districts, deep-water flatfish, rex sole, flathead sole in the West Yakutat and SEO Districts, Pacific ocean perch, northern rockfish, shortraker rockfish, dusky

rockfish, roughey and blackspotted rockfish, demersal shelf rockfish, thornyhead rockfish, “other rockfish” in the Western and Central GOA and the West Yakutat District, big skate, longnose skate, other skates, sculpins, sharks, squids, and octopuses in the GOA. The Council recommended TACs for 2018 and 2019 that are less than the ABCs for pollock in the Western and Central GOA and the West Yakutat District, Pacific cod, shallow-water flatfish in the Western GOA, arrowtooth flounder, flathead sole in the Western and Central GOA, “other rockfish” in the SEO District, and Atka mackerel. The combined Western, Central, and West Yakutat pollock TACs and the GOA Pacific cod TACs are set to accommodate the State of Alaska’s (State’s) guideline harvest levels (GHLs) for Pacific cod so that the ABCs are not exceeded. The shallow-water flatfish, arrowtooth flounder, and flathead sole TACs are set to allow for increased harvest opportunities for these target species while conserving the halibut PSC limit for use in other, more fully utilized fisheries. The “other rockfish” TAC in the SEO District is set to reduce the amount of discards of the species in that complex. The Atka mackerel TAC is set to accommodate incidental catch amounts in other fisheries.

As noted in the proposed 2018 and 2019 harvest specifications for the GOA, the 2018 and 2019 Pacific cod OFL, ABC, and TAC is significantly lower than the 2018 Pacific cod OFL, ABC, and TAC published in the final 2017 and 2018 harvest specifications (82 FR 12032, February 27, 2017). Based on the final 2017 Pacific cod stock assessment, the 2018 and 2019 Pacific cod OFL and ABC is much lower than previously estimated. The final 2018 Pacific cod ABC and TAC is 18,000 mt and 13,096 mt, respectively, and the final 2019 Pacific cod ABC and TAC is 17,000 mt and 12,368 mt, respectively. The TACs are the basis for numerous seasonal and sector apportionments of Pacific cod, and such apportionments are significantly

decreased as well. The final seasonal and sector apportionments of Pacific cod TACs are provided in Tables 5 and 6 in this rule.

The final 2018 and 2019 harvest specifications approved by the Secretary are unchanged from those recommended by the Council and are consistent with the preferred harvest strategy alternative in the EIS (see **ADDRESSES**). NMFS finds that the Council's recommended OFLs, ABCs, and TACs are consistent with the biological condition of the groundfish stocks as described in the final 2017 SAFE report. NMFS also finds that the Council's recommendations for OFLs, ABCs, and TACs are consistent with the biological condition of groundfish stocks as adjusted for other biological and socioeconomic considerations, including maintaining the total TAC within the OY range. NMFS reviewed the Council's recommended TAC specifications and apportionments, and NMFS approves these harvest specifications under 50 CFR 679.20(c)(3)(ii). The apportionment of TAC amounts among gear types and sectors, processing sectors, and seasons is discussed below.

Tables 1 and 2 list the final 2018 and 2019 OFLs, ABCs, TACs, and area apportionments of groundfish in the GOA. The sums of the 2018 and 2019 ABCs are 536,921 mt and 480,187 mt, respectively, which are lower than the 2017 ABC sum of 667,877 mt (82 FR 12032, February 27, 2017). The 2018 harvest specifications set in this final action will supersede the 2018 harvest specifications previously set in the final 2017 and 2018 harvest specifications (82 FR 12032, February 27, 2017). The 2019 harvest specifications will be superseded in early 2019 when the final 2019 and 2020 harvest specifications are published. Pursuant to this final action, the 2018 harvest specifications therefore will apply for the remainder of the current year (2018), while the 2019 harvest specifications are projected only for the following year (2019) and will be superseded in early 2019 by the final 2019 and 2020 harvest specifications. Because this final

action (published in early 2018) will be superseded in early 2019 by the publication of the final 2019 and 2020 harvest specifications, it is projected that this final action will implement the harvest specifications for the Gulf of Alaska for approximately one year.

Specification and Apportionment of TAC Amounts

NMFS' apportionment of groundfish species is based on the distribution of biomass among the regulatory areas over which NMFS manages the species. Additional regulations govern the apportionment of pollock, Pacific cod, and sablefish. Additional detail on the apportionment of pollock, Pacific cod, and sablefish are described below.

The ABC for the pollock stock in the combined Western, Central, and West Yakutat Regulatory Areas (W/C/WYK) includes the amount for the GHL established by the State for the Prince William Sound (PWS) pollock fishery. The Plan Team, SSC, AP, and Council have recommended that the sum of all State and Federal water pollock removals from the GOA not exceed ABC recommendations. For 2018 and 2019, the SSC recommended and the Council approved the W/C/WYK pollock ABC, including the amount to account for the State's PWS GHL. At the November 2017 Plan Team meeting, State fisheries managers recommended setting the PWS GHL at 2.5 percent of the annual W/C/WYK pollock ABC. For 2018, this yields a PWS pollock GHL of 4,037 mt, a decrease of 1,057 mt from the 2017 PWS GHL of 5,094 mt. For 2019, the PWS pollock GHL is 2,664 mt, a decrease of 2,430 mt from the 2017 PWS pollock GHL of 5,094 mt. After the GHL reductions, the 2018 and 2019 pollock ABC for the combined W/C/WYK areas is then apportioned between four statistical areas (Areas 610, 620, 630, and 640) as both ABCs and TACs, as described below and detailed in Tables 1 and 2. The total ABCs and TACs for the four statistical areas, plus the State GHL, do not exceed the combined W/C/WYK ABC.

Apportionments of pollock to the W/C/WYK management areas are considered to be “apportionments of annual catch limits (ACLs)” rather than “ABCs.” This more accurately reflects that such apportionments address management, rather than biological or conservation, concerns. In addition, apportionments of the ACL in this manner allow NMFS to balance any transfer of TAC among Areas 610, 620, and 630 pursuant to § 679.20(a)(5)(iv)(B) to ensure that the area-wide ACL and ABC are not exceeded.

NMFS establishes pollock TACs in the Western (Area 610) and Central (Areas 620 and 630) GOA and the West Yakutat (Area 640) and the SEO (Area 650) Districts of the GOA (see Tables 1 and 2). NMFS also establishes seasonal apportionments of the annual pollock TAC in the Western and Central Regulatory Areas of the GOA among Statistical Areas 610, 620, and 630. These apportionments are divided equally among each of the following four seasons: the A season (January 20 through March 10), the B season (March 10 through May 31), the C season (August 25 through October 1), and the D season (October 1 through November 1) (§§ 679.23(d)(2)(i) through (iv), and 679.20(a)(5)(iv)(A) and (B)). Additional detail is provided in this rule; Tables 3 and 4 list these amounts.

The 2018 and 2019 Pacific cod TACs are set to accommodate the State’s GHL for Pacific cod in State waters in the Western and Central Regulatory Areas, as well as in PWS. The Plan Team, SSC, AP, and Council recommended that the sum of all State and Federal water Pacific cod removals from the GOA not exceed ABC recommendations. Accordingly, the Council set the 2018 and 2019 Pacific cod TACs in the Western, Central, and Eastern Regulatory Areas to account for State GHLs. Therefore, the 2018 Pacific cod TACs are less than the ABCs by the following amounts: 1) Western GOA, 2,425 mt; 2) Central GOA, 2,030 mt; and 3) Eastern GOA, 450 mt. The 2019 Pacific cod TACs are less than the ABCs by the following amounts: 1)

Western GOA, 2,290 mt; 2) Central GOA, 1,917 mt; and 3) Eastern GOA, 425 mt. These amounts reflect the State's 2018 and 2019 GHGs in these areas, which are 30 percent of the Western GOA ABC and 25 percent of the Eastern and Central GOA ABCs.

NMFS establishes seasonal apportionments of the annual Pacific cod TAC in the Western and Central Regulatory Areas. Sixty percent of the annual TAC is apportioned to the A season for hook-and-line, pot, and jig gear from January 1 through June 10, and for trawl gear from January 20 through June 10. Forty percent of the annual TAC is apportioned to the B season for jig gear from June 10 through December 31, for hook-and-line and pot gear from September 1 through December 31, and for trawl gear from September 1 through November 1 (§§ 679.23(d)(3) and 679.20(a)(12)). The Western and Central GOA Pacific cod TACs are allocated among various gear and operational sectors. The Pacific cod sector apportionments are discussed in detail in a subsequent section and in Tables 5 and 6 of this rule.

The Council's recommendation for sablefish area apportionments takes into account the prohibition on the use of trawl gear in the SEO District of the Eastern Regulatory Area (§ 679.7(b)(1)) and makes available five percent of the combined Eastern Regulatory Area TACs to vessels using trawl gear for use as incidental catch in other groundfish fisheries in the WYK District (§ 679.20(a)(4)(i)). Tables 7 and 8 list the final 2018 and 2019 allocations of sablefish TAC to fixed gear and trawl gear in the GOA.

Changes from the Proposed 2018 and 2019 Harvest Specifications in the GOA

In October 2017, the Council's recommendations for the proposed 2018 and 2019 harvest specifications (82 FR 57924, December 8, 2017) were based largely on information contained in the final 2016 SAFE report for the GOA groundfish fisheries, dated November 2016. The final 2016 SAFE report for the GOA is available from the Council (see **ADDRESSES**). The Council

proposed that the final OFLs, ABCs, and TACs established for the 2018 groundfish fisheries (82 FR 12032, February 27, 2017) be used for the proposed 2018 and 2019 harvest specifications (82 FR 57924, December 8, 2017), pending completion and review of the final 2017 SAFE report at its December 2017 meeting.

As described previously, the SSC adopted the final 2018 and 2019 OFLs and ABCs recommended by the Plan Team. The Council adopted the SSC's OFL and ABC recommendations and the AP's TAC recommendations for 2018 and 2019, with one exception for the Central GOA arrowtooth flounder TAC. The AP recommended 2018 and 2019 arrowtooth flounder TACs of 73,480 mt and 70,700 mt, respectively. The Council revised this TAC recommendation to 48,000 mt for both 2018 and 2019. The Council's rationale included a concern that a higher arrowtooth flounder TAC would result in bycatch concerns, and that lower arrowtooth flounder TACs than those recommended by the AP are appropriate because catch rarely, if ever, approach the proposed ABCs or TACs. Also, the Council set this TAC to allow for increased harvest opportunities while conserving the halibut PSC limit for use in other, more fully utilized fisheries.

The final 2018 ABCs are higher than the proposed 2018 ABCs published in the proposed 2018 and 2019 harvest specifications (82 FR 57924, December 8, 2017) for pollock, sablefish, shallow-water flatfish, deep-water flatfish, rex sole, Pacific ocean perch, northern rockfish, dusky rockfish, rougheye and blackspotted rockfish, demersal shelf rockfish, thornyhead rockfish, and longnose skate. The final 2018 ABCs are lower than the proposed 2018 ABCs for Pacific cod, arrowtooth flounder, flathead sole, shortraker rockfish, other rockfish, big skate, other skates, sculpins, squids, and octopuses.

The final 2019 ABCs are higher than the proposed ABCs for sablefish, shallow-water flatfish, deep-water flatfish, rex sole, flathead sole, Pacific ocean perch, rougheye and blackspotted rockfish, demersal shelf rockfish, thornyhead rockfish, and longnose skate. The final 2019 ABCs are lower than the proposed 2019 ABCs for pollock, Pacific cod, arrowtooth flounder, northern rockfish, shortraker rockfish, dusky rockfish, other rockfish, big skates, other skates, sculpins, squids, and octopuses. For the remaining target species (Atka mackerel and sharks), the Council recommended the final 2018 and 2019 ABCs that are the same as the proposed 2018 and 2019 ABCs.

Additional information explaining the changes between the proposed and final ABCs is included in the final 2017 SAFE report, which was not available when the Council made its proposed ABC and TAC recommendations in October 2017. At that time, the most recent stock assessment information was contained in the final 2016 SAFE report. The final 2017 SAFE report contains the best and most recent scientific information on the condition of the groundfish stocks, as previously discussed in this preamble, and is available for review (see **ADDRESSES**). The Council considered the final 2017 SAFE report in December 2017 when it made recommendations for the final 2018 and 2019 harvest specifications. In the GOA, the total final 2018 TAC amount is 427,512 mt, a decrease of 8 percent from the total proposed 2018 TAC amount of 465,832 mt. The total final 2019 TAC amount is 376,417 mt, a decrease of 19 percent from the total proposed 2019 TAC amount of 465,832 mt. Table 1a summarizes the difference between the proposed and final TACs.

Annual stock assessments incorporate a variety of new or revised inputs, such as survey data or catch information, as well as changes to the statistical models used to estimate a species' biomass and population trend. The biennial GOA trawl survey was conducted in 2017. Thus,

changes to biomass and ABC estimates are based on survey biomass information, as well as fishery catch updates to species' assessment models. Some species, such as pollock and sablefish, have additional surveys conducted on an annual basis, which result in additional data being available for the assessments for these stocks.

The changes from the proposed 2018 TACs to the final 2018 TACs are within a range of plus 83 percent or minus 80 percent, and the changes from the proposed 2019 TACs to the final 2019 TACs are within a range of plus 73 percent or minus 80 percent. Based on changes in the estimates of overall biomass made by stock assessment scientists for 2018 and 2019, as compared to the estimates previously made for 2017 and 2018, the species or species group with the greatest TAC percentage increases are sablefish, shallow-water flatfish, rex sole, Pacific ocean perch, roughey and blackspotted rockfish, demersal shelf rockfish, and longnose skates. Based on changes in the estimates of biomass, the species or species group with the greatest decreases in TACs are Pacific cod, arrowtooth flounder, shortraker rockfish, big skate, other skates, and octopuses. For all other species and species groups, changes from the proposed 2018 TACs to the final 2018 TACs and changes from the proposed 2019 TACs to the final 2019 TACs are less than a 10 percent change (either increase or decrease). These TAC changes correspond to associated changes in the ABCs and TACs, as recommended by the SSC, AP, and Council.

Detailed information providing the basis for the changes described above is contained in the final 2017 SAFE report. The final TACs are based on the best scientific information available. These TACs are specified in compliance with the harvest strategy described in the proposed and final rules for the 2018 and 2019 harvest specifications. The changes in TACs between the proposed rule and this final rule are compared in Table 1a.

Table 1a. Comparison of Proposed and Final 2018 and 2019 GOA Total Allowable Catch Limits (Values are rounded to the nearest metric ton and percentage).

Species	2018 and 2019 Proposed TAC	2018 Final TAC	2018 Final minus 2018 Proposed TAC	Percentage difference	2019 Final TAC	2019 Final minus 2019 Proposed TAC	Percentage difference
Pollock	163,479	166,228	2,749	2%	112,678	-50,801	-31%
Pacific cod	40,069	13,096	-26,973	-67%	12,368	-27,701	-69%
Sablefish	10,207	11,505	1,298	13%	16,194	5,987	59%
Shallow-water flatfish	36,979	42,732	5,753	16%	43,128	6,149	17%
Deep-water flatfish	9,382	9,385	3	0%	9,499	117	1%
Rex sole	8,421	15,373	6,952	83%	14,529	6,108	73%
Arrowtooth flounder	103,300	76,300	-27,000	-26%	76,300	-27,000	-26%
Flathead sole	27,920	26,388	-1,532	-5%	26,487	-1,433	-5%
Pacific ocean perch	23,454	29,236	5,782	25%	28,605	5,151	22%
Northern rockfish	3,508	3,681	173	5%	3,347	-161	-5%
Shortraker rockfish	1286	863	-423	-33%	864	-422	-33%
Dusky rockfish	3,954	3,957	3	0%	3,668	-286	-7%
Rougheye rockfish	1,318	1,444	126	10%	1,427	109	8%
Demersal shelf rockfish	227	250	23	10%	250	23	10%
Thornyhead rockfish	1,961	2,038	77	4%	2,038	77	4%
Other rockfish	2,308	2,305	-3	0%	2,305	-3	0%
Atka mackerel	3,000	3,000	0	0%	3,000	0	0%
Big skate	3,814	2,848	-966	-25%	2,848	-966	-25%
Longnose skate	3,206	3,572	366	11%	3,572	366	11%
Other skates	1,919	1,384	-535	-28%	1,384	-535	-28%
Sculpins	5,591	5,301	-290	-5%	5,301	-290	-5%
Sharks	4,514	4,514	0	0%	4,514	0	0%
Squids	1,137	1,137	0	0%	1,137	0	0%
Octopuses	4,878	975	-3,903	-80%	975	-3,903	-80%
Total	465,832	427,512	-38,320	-8%	376,418	-89,414	-19%

The final 2018 and 2019 TAC recommendations for the GOA are within the OY range established for the GOA and do not exceed the ABC for any species or species group. Tables 1 and 2 list the final OFL, ABC, and TAC amounts for GOA groundfish for 2018 and 2019, respectively.

Table 1. Final 2018 OFLs, ABCs, and TACs of Groundfish for the Western/Central/West Yakutat, Western, Central, Eastern Regulatory Areas, and in the West Yakutat, Southeast Outside, and Gulfwide Districts of the Gulf of Alaska (Values are rounded to the nearest metric ton).

Species	Area ¹	OFL	ABC	TAC
Pollock ²	Shumagin (610)	n/a	30,188	30,188
	Chirikof (620)	n/a	79,495	79,495
	Kodiak (630)	n/a	40,939	40,939
	WYK (640)	n/a	6,833	6,833
	W/C/WYK (subtotal) ²	187,059	161,492	157,455
	SEO (650)	11,697	8,773	8,773
	Total	198,756	170,265	166,228
Pacific cod ³	W	n/a	8,082	5,657
	C	n/a	8,118	6,089
	E	n/a	1,800	1,350
	Total	23,565	18,000	13,096
Sablefish ⁴	W	n/a	1,544	1,544
	C	n/a	5,158	5,158
	WYK	n/a	1,829	1,829
	SEO	n/a	2,974	2,974
	E (WYK and SEO) (subtotal)	n/a	4,803	4,803
	Total	22,703	11,505	11,505
Shallow-water flatfish ⁵	W	n/a	25,206	13,250
	C	n/a	25,315	25,315
	WYK	n/a	2,242	2,242
	SEO	n/a	1,925	1,925
	Total	67,240	54,688	42,732
Deep-water flatfish ⁶	W	n/a	413	413
	C	n/a	3,400	3,400
	WYK	n/a	3,239	3,239
	SEO	n/a	2,332	2,332
	Total	11,294	9,385	9,385
Rex sole	W	n/a	3,086	3,086
	C	n/a	8,739	8,739
	WYK	n/a	1,737	1,737
	SEO	n/a	1,811	1,811
	Total	18,706	15,373	15,373
Arrowtooth flounder	W	n/a	37,253	14,500
	C	n/a	73,480	48,000
	WYK	n/a	16,468	6,900
	SEO		23,744	6,900
	Total	180,697	150,945	76,300
Flathead sole	W	n/a	12,690	8,650

	C	n/a	20,238	15,400
	WYK	n/a	1,932	1,932
	SEO	n/a	406	406
	Total	43,011	35,266	26,388
Pacific ocean perch ⁷	W	n/a	3,312	3,312
	C	n/a	20,112	20,112
	WYK	n/a	3,371	3,371
	W/C/WYK subtotal	31,860	26,795	26,795
	SEO	2,902	2,441	2,441
	Total	34,762	29,236	29,236
Northern rockfish ⁸	W	n/a	420	420
	C	n/a	3,261	3,261
	E	n/a	4	-
	Total	4,380	3,685	3,681
Shortraker rockfish ⁹	W	n/a	44	44
	C	n/a	305	305
	E	n/a	514	514
	Total	1,151	863	863
Dusky rockfish ¹⁰	W	n/a	146	146
	C	n/a	3,502	3,502
	WYK	n/a	232	232
	SEO	n/a	77	77
	Total	4,841	3,957	3,957
Rougheye and Blackspotted rockfish ¹¹	W	n/a	176	176
	C	n/a	556	556
	E	n/a	712	712
	Total	1,735	1,444	1,444
Demersal shelf rockfish ¹²	SEO	394	250	250
Thornyhead rockfish	W	n/a	344	344
	C	n/a	921	921
	E	n/a	773	773
	Total	2,717	2,038	2,038
Other rockfish ^{13, 14}	W and C	n/a	1,737	1,737
	WYK	n/a	368	368
	SEO	n/a	3,489	200
	Total	7,356	5,594	2,305
Atka mackerel	GW	6,200	4,700	3,000
Big skate ¹⁵	W	n/a	504	504
	C	n/a	1,774	1,774
	E	n/a	570	570
	Total	3,797	2,848	2,848
Longnose skate ¹⁶	W	n/a	149	149

	C	n/a	2,804	2,804
	E	n/a	619	619
	Total	4,763	3,572	3,572
Other skates ¹⁷	GW	1,845	1,384	1,384
Sculpins	GW	6,958	5,301	5,301
Sharks	GW	6,020	4,514	4,514
Squids	GW	1,516	1,137	1,137
Octopus	GW	1,300	975	975
Total		655,707	536,921	427,512

¹ Regulatory areas and districts are defined at § 679.2. (W=Western Gulf of Alaska; C=Central Gulf of Alaska; E=Eastern Gulf of Alaska; WYK=West Yakutat District; SEO=Southeast Outside District; GW=Gulf-wide).

² The total for the W/C/WYK Regulatory Areas pollock ABC is 161,492 mt. After deducting 2.5 percent (4,037 mt) of that ABC for the State's pollock GHL fishery, the remaining pollock ABC of 157,455 mt (for the W/C/WYK Regulatory Areas) is apportioned among four statistical areas (Areas 610, 620, 630, and 640). These apportionments are considered subarea ACLs, rather than ABCs, for specification and reapportionment purposes. The ACLs in Areas 610, 620, and 630 are further divided by season, as detailed in Table 3 (final 2018 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances). In the West Yakutat (Area 640) and Southeast Outside (Area 650) Districts of the Eastern Regulatory Area, pollock is not divided into seasonal allowances.

³ The annual Pacific cod TAC is apportioned 60 percent to the A season and 40 percent to the B season in the Western and Central Regulatory Areas of the GOA. Pacific cod TAC in the Eastern Regulatory Area is allocated 90 percent for processing by the inshore component and 10 percent for processing by the offshore component. Table 5 lists the final 2018 Pacific cod seasonal apportionments.

⁴ Sablefish is allocated to trawl and fixed gear in 2018. Table 7 lists the final 2018 allocations of sablefish TACs.

⁵ "Shallow-water flatfish" means flatfish not including "deep-water flatfish," flathead sole, rex sole, or arrowtooth flounder.

⁶ "Deep-water flatfish" means Dover sole, Greenland turbot, Kamchatka flounder, and deepsea sole.

⁷ "Pacific ocean perch" means *Sebastes alutus*.

⁸ "Northern rockfish" means *Sebastes polyspinis*. For management purposes, the 4 mt apportionment of ABC to the WYK District of the Eastern Gulf of Alaska has been included in the "other rockfish" species group.

⁹ "Shortraker rockfish" means *Sebastes borealis*.

¹⁰ "Dusky rockfish" means *Sebastes variabilis*.

¹¹ "Rougheye rockfish" means *Sebastes aleutianus* (rougheye) and *Sebastes melanostictus* (blackspotted).

¹² "Demersal shelf rockfish" means *Sebastes pinniger* (canary), *S. nebulosus* (china), *S. caurinus* (copper), *S. maliger* (quillback), *S. helvomaculatus* (rosethorn), *S. nigrocinctus* (tiger), and *S. ruberrimus* (yelloweye).

¹³ "Other rockfish" means *Sebastes aurora* (aurora), *S. melanostomus* (blackgill), *S. paucispinis* (bocaccio), *S. goodei* (chilipepper), *S. crameri* (darkblotch), *S. elongatus* (greenstriped), *S. variegatus* (harlequin), *S. wilsoni* (pygmy), *S. babcocki* (redbanded), *S. proriger* (redstripe), *S. zacentrus* (sharpchin), *S. jordani* (shortbelly), *S. brevispinis* (silvergry), *S. diploproa* (splitnose), *S. saxicola* (stripetail), *S. miniatus* (vermillion), *S. reedi* (yellowmouth), *S. entomelas* (widow), and *S. flavidus* (yellowtail). In the Eastern GOA only, other rockfish also includes northern rockfish, *S. polyspinis*.

¹⁴ "Other rockfish" in the Western and Central Regulatory Areas and in the West Yakutat District means other rockfish and demersal shelf rockfish. The "other rockfish" species group in the SEO District only includes other rockfish.

¹⁵ "Big skate" means *Raja binoculata*.

¹⁶ "Longnose skate" means *Raja rhina*.

¹⁷ "Other skates" means *Bathyrāja* and *Raja* spp.

Table 2. Final 2019 OFLs, ABCs, and TACs of Groundfish for the Western/Central/West Yakutat, Western, Central, Eastern Regulatory Areas, and in the West Yakutat, Southeast Outside, and Gulfwide Districts of the Gulf of Alaska (Values are rounded to the nearest metric ton).

Species	Area ¹	OFL	ABC	TAC
Pollock ²	Shumagin (610)	n/a	19,921	19,921
	Chirikof (620)	n/a	52,459	52,459
	Kodiak (630)	n/a	27,016	27,016
	WYK (640)	n/a	4,509	4,509
	W/C/WYK (subtotal) ²	131,170	106,569	103,905
	SEO (650)	11,697	8,773	8,773
	Total	142,867	115,341	112,678
Pacific cod ³	W	n/a	7,633	5,343
	C	n/a	7,667	5,750
	E	n/a	1,700	1,275
	Total	21,412	17,000	12,368
Sablefish ⁴	W	n/a	2,174	2,174
	C	n/a	7,260	7,260
	WYK	n/a	2,573	2,573
	SEO	n/a	4,187	4,187
	E (WYK and SEO) (subtotal)	n/a	6,760	6,760
	Total	35,989	16,194	16,194
Shallow-water flatfish ⁵	W	n/a	25,544	13,250
	C	n/a	25,655	25,655
	WYK	n/a	2,272	2,272
	SEO	n/a	1,951	1,951
	Total	68,114	55,422	43,128
Deep-water flatfish ⁶	W	n/a	416	416
	C	n/a	3,442	3,442
	WYK	n/a	3,279	3,279
	SEO	n/a	2,361	2,361
	Total	11,431	9,499	9,499
Rex sole	W	n/a	2,909	2,909
	C	n/a	8,236	8,236
	WYK	n/a	1,657	1,657
	SEO	n/a	1,727	1,727
	Total	17,692	14,529	14,529
Arrowtooth flounder	W	n/a	35,844	14,500
	C	n/a	70,700	48,000
	WYK	n/a	15,845	6,900
	SEO	n/a	22,845	6,900
	Total	173,872	145,234	76,300
Flathead sole	W	n/a	13,222	8,650
	C	n/a	21,087	15,400
	WYK	n/a	2,013	2,013

	SEO	n/a	424	424
	Total	44,822	36,746	26,487
Pacific ocean perch ⁷	W	n/a	3,240	3,240
	C	n/a	19,678	19,678
	WYK	n/a	3,298	3,298
	W/C/WYK	31,170	26,216	26,216
	SEO	2,840	2,389	2,389
	Total	34,010	28,605	28,605
Northern rockfish ⁸	W	n/a	382	382
	C	n/a	2,965	2,965
	E	n/a	3	-
	Total	3,984	3,350	3,347
Shortraker rockfish ⁹	W	n/a	44	44
	C	n/a	305	305
	E	n/a	514	514
	Total	1,151	863	863
Dusky rockfish ¹⁰	W	n/a	135	135
	C	n/a	3,246	3,246
	WYK	n/a	215	215
	SEO	n/a	72	72
	Total	4,488	3,668	3,668
Rougheye and Blackspotted rockfish ¹¹	W	n/a	174	174
	C	n/a	550	550
	E	n/a	703	703
	Total	1,715	1,427	1,427
Demersal shelf rockfish ¹²	SEO	394	250	250
Thornyhead rockfish	W	n/a	344	344
	C	n/a	921	921
	E	n/a	773	773
	Total	2,717	2,038	2,038
Other rockfish ^{13,14}	W and C	n/a	1,737	1,737
	WYK	n/a	368	368
	SEO	n/a	3,488	200
	Total	7,356	5,593	2,305
Atka mackerel	GW	6,200	4,700	3,000
Big skate ¹⁵	W	n/a	504	504
	C	n/a	1,774	1,774
	E	n/a	570	570
	Total	3,797	2,848	2,848
Longnose skate ¹⁶	W	n/a	149	149
	C	n/a	2,804	2,804
	E	n/a	619	619

	Total	4,763	3,572	3,572
Other skates ¹⁷	GW	1,845	1,384	1,384
Sculpins	GW	6,958	5,301	5,301
Sharks	GW	6,020	4,514	4,514
Squids	GW	1,516	1,137	1,137
Octopus	GW	1,300	975	975
Total		604,413	480,187	376,417

¹ Regulatory areas and districts are defined at § 679.2. (W=Western Gulf of Alaska; C=Central Gulf of Alaska; E=Eastern Gulf of Alaska; WYK=West Yakutat District; SEO=Southeast Outside District; GW=Gulf-wide).

² The total for the W/C/WYK Regulatory Areas pollock ABC is 106,569 mt. After deducting 2.5 percent (2,664 mt) of that ABC for the State's pollock GHF fishery, the remaining pollock ABC of 103,905 mt (for the W/C/WYK Regulatory Areas) is apportioned among four statistical areas (Areas 610, 620, 630, and 640). These apportionments are considered subarea ACLs, rather than ABCs, for specification and reapportionment purposes. The ACLs in Areas 610, 620, and 630 are further divided by season, as detailed in Table 4 (final 2019 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances). In the West Yakutat (Area 640) and Southeast Outside (Area 650) Districts of the Eastern Regulatory Area, pollock is not divided into seasonal allowances.

³ The annual Pacific cod TAC is apportioned 60 percent to the A season and 40 percent to the B season in the Western and Central Regulatory Areas of the GOA. Pacific cod in the Eastern Regulatory Area is allocated 90 percent for processing by the inshore component and 10 percent for processing by the offshore component. Table 6 lists the final 2019 Pacific cod seasonal apportionments.

⁴ Sablefish is only allocated to trawl gear for 2019. Table 8 lists the final 2019 allocation of sablefish TACs to trawl gear.

⁵ "Shallow-water flatfish" means flatfish not including "deep-water flatfish," flathead sole, rex sole, or arrowtooth flounder.

⁶ "Deep-water flatfish" means Dover sole, Greenland turbot, Kamchatka flounder, and deepsea sole.

⁷ "Pacific ocean perch" means *Sebastes alutus*.

⁸ "Northern rockfish" means *Sebastes polyspinis*. For management purposes the 3 mt apportionment of ABC to the WYK District of the Eastern Gulf of Alaska has been included in the "other rockfish" species group.

⁹ "Shortraker rockfish" means *Sebastes borealis*.

¹⁰ "Dusky rockfish" means *Sebastes variabilis*.

¹¹ "Rougheye rockfish" means *Sebastes aleutianus* (rougheye) and *Sebastes melanostictus* (blackspotted).

¹² "Demersal shelf rockfish" means *Sebastes pinniger* (canary), *S. nebulosus* (china), *S. caurinus* (copper), *S. maliger* (quillback), *S. helvomaculatus* (rosethorn), *S. nigrocinctus* (tiger), and *S. ruberrimus* (yelloweye).

¹³ "Other rockfish" means *Sebastes aurora* (aurora), *S. melanostomus* (blackgill), *S. paucispinis* (bocaccio), *S. goodei* (chilipepper), *S. crameri* (darkblotch), *S. elongatus* (greenstriped), *S. variegatus* (harlequin), *S. wilsoni* (pygmy), *S. babcocki* (redbanded), *S. proriger* (redstripe), *S. zacentrus* (sharpchin), *S. jordani* (shortbelly), *S. brevispinis* (silverygrey), *S. diploproa* (splitnose), *S. saxicola* (stripetail), *S. miniatus* (vermillion), *S. reedi* (yellowmouth), *S. entomelas* (widow), and *S. flavidus* (yellowtail). In the Eastern GOA only, other rockfish also includes northern rockfish, *S. polyspinis*.

¹⁴ "Other rockfish" in the Western and Central Regulatory Areas and in the West Yakutat District means other rockfish and demersal shelf rockfish. The "other rockfish" species group in the SEO District only includes other rockfish.

¹⁵ "Big skate" means *Raja binoculata*.

¹⁶ "Longnose skate" means *Raja rhina*.

¹⁷ "Other skates" means *Bathyraja* and *Raja* spp.

Apportionment of Reserves

Section 679.20(b)(2) requires NMFS to set aside 20 percent of each TAC for pollock, Pacific cod, flatfish, sculpins, sharks, squids, and octopuses in reserve for possible apportionment at a later date during the fishing year. For 2018 and 2019, NMFS proposed reapportionment of all the reserves in the proposed 2018 and 2019 harvest specifications published in the *Federal Register* on December 8, 2017 (82 FR 57924). NMFS did not receive any public comments on the proposed reapportionments. For the final 2018 and 2019 harvest specifications, NMFS reapportioned, as proposed, all the reserves for pollock, Pacific cod, flatfish, sculpins, sharks, squids, and octopuses back into the original TAC limit from which the reserve was derived. This was done because NMFS expects, based on recent harvest patterns, that such reserves are not necessary and the entire TAC for each of these species will be caught. The TACs listed in Tables 1 and 2 reflect reapportionments of reserve amounts to the original TAC limit for these species and species groups; *i.e.*, each proposed TAC for the above mentioned species or species groups contains the full TAC recommended by the Council.

Apportionments of Pollock TAC Among Seasons and Regulatory Areas, and Allocations for Processing by Inshore and Offshore Components

In the GOA, pollock is apportioned by season and area, and is further allocated for processing by inshore and offshore components. Pursuant to § 679.20(a)(5)(iv)(B), the annual pollock TAC specified for the Western and Central Regulatory Areas of the GOA is apportioned into four equal seasonal allowances of 25 percent. As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively.

Pollock TACs in the Western and Central Regulatory Areas of the GOA are apportioned among Statistical Areas 610, 620, and 630 in proportion to the distribution of the pollock biomass, pursuant to § 679.20(a)(5)(iv)(A). In the A and B seasons, the apportionments previously were in proportion to the distribution of pollock biomass based on the four most recent NMFS winter surveys. In the C and D seasons, the apportionments were in proportion to the distribution of pollock biomass based on the four most recent NMFS summer surveys. For 2018 and 2019, the Council recommended, and NMFS approved, following the apportionment methodology that was used previously for the 2017 and 2018 harvest specifications. This methodology averages the winter and summer distribution of pollock in the Central Regulatory Area for the A season instead of using the distribution based on only the winter surveys. The average is intended to reflect the best available information about migration patterns, distribution of pollock, and the performance of the fishery in the area during the A season for the 2018 and 2019 fishing years. For the A season, the apportionment is based on an adjusted estimate of the relative distribution of pollock biomass of approximately 3 percent, 73 percent, and 24 percent in Statistical Areas 610, 620, and 630, respectively. For the B season, the apportionment is based on the relative distribution of pollock biomass at 4 percent, 85 percent, and 11 percent in Statistical Areas 610, 620, and 630, respectively. For the C and D seasons, the apportionment is based on the relative distribution of pollock biomass at 37 percent, 27 percent, and 37 percent in Statistical Areas 610, 620, and 630, respectively. The pollock chapter of the 2017 SAFE report (see ADDRESSES) contains a comprehensive description of the apportionment process and reasons for the minor changes from past apportionments.

Within any fishing year, the amount by which a seasonal allowance is underharvested or overharvested may be added to, or subtracted from, subsequent seasonal allowances for the

Western and Central Regulatory Areas in a manner to be determined by the Regional Administrator (§ 679.20(a)(5)(iv)(B)). The rollover amount is limited to 20 percent of the subsequent seasonal TAC apportionment for the statistical area. Any unharvested pollock above the 20-percent limit could be further distributed to the other statistical areas, in proportion to the estimated biomass in the subsequent season in those statistical areas and in an amount no more than 20 percent of the seasonal TAC apportionment in those statistical areas (§ 679.20(a)(5)(iv)(B)). The pollock TACs in the WYK and the SEO Districts of 6,833 mt and 8,773 mt, respectively, in 2018, and 4,509 mt and 8,773 mt, respectively, in 2019, are not allocated by season.

Section 679.20(a)(6)(i) requires the allocation of 100 percent of the pollock TAC in all GOA regulatory areas and all seasonal allowances to vessels harvesting pollock for processing by the inshore component after subtraction of amounts projected by the Regional Administrator to be caught by, or delivered to, the offshore component incidental to directed fishing for other groundfish species. Thus, the amount of pollock available to vessels harvesting pollock for processing by the offshore component is that amount that will be taken as incidental catch during directed fishing for groundfish species other than pollock, up to the maximum retainable amounts allowed by § 679.20(e) and (f). At this time, these incidental catch amounts of pollock are unknown and will be determined during the fishing year during the course of fishing activities by the offshore component. Therefore, amounts of pollock for processing by the inshore and offshore components are not shown in Tables 3 and 4. Tables 3 and 4 list the final 2018 and 2019 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances.

Table 3. Final 2018 Distribution of Pollock in the Western and Central Regulatory Areas of the GOA; Seasonal Biomass Distribution; Area Apportionments; and Seasonal Allowances of Annual TAC (Values are rounded to the nearest metric ton and percentages are rounded to the nearest 0.01.).

Season ¹	Shumagin (Area 610)		Chirikof (Area 620)		Kodiak (Area 630)		Total ²
A (Jan 20-Mar 10)	1,317	3.50%	27,314	72.54%	9,025	23.97%	37,656
B (Mar 10-May 31)	1,317	4.50%	32,155	85.39%	4,184	11.11%	37,656
C (Aug 25-Oct 1)	13,777	36.59%	10,013	26.59%	13,865	36.82%	37,656
D (Oct 1-Nov 1)	13,777	36.59%	10,013	26.59%	13,865	36.82%	37,656
Annual Total	30,188		79,495		40,939		150,622

¹ As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively. The amounts of pollock for processing by the inshore and offshore components are not shown in this table.

² The WYK District and SEO District pollock TACs are not allocated by season and are not included in the total pollock TACs shown in this table.

Table 4. Final 2019 Distribution of Pollock in the Western and Central Regulatory Areas of the GOA; Seasonal Biomass Distribution; Area Apportionments; and Seasonal Allowances of Annual TAC (Values are rounded to the nearest metric ton and percentages are rounded to the nearest 0.01.).

Season ¹	Shumagin (Area 610)		Chirikof (Area 620)		Kodiak (Area 630)		Total ²
A (Jan 20-Mar 10)	869	3.50%	18,025	72.54%	5,955	23.97%	24,849
B (Mar 10-May 31)	869	4.50%	21,219	85.39%	2,761	11.11%	24,849
C (Aug 25-Oct 1)	9,091	36.59%	6,608	26.59%	9,150	36.82%	24,849
D (Oct 1-Nov 1)	9,091	36.59%	6,608	26.59%	9,150	36.82%	24,849
Annual Total	19,921		52,459		27,016		99,395

¹ As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively. The amounts of pollock for processing by the inshore and offshore components are not shown in this table.

² The WYK District and SEO District pollock TACs are not allocated by season and are not included in the total pollock TACs shown in this table.

Annual and Seasonal Apportionments of Pacific Cod TAC

Pursuant to § 679.20(a)(12)(i), NMFS seasonally allocates the Pacific cod TACs in the Western and Central Regulatory Areas of the GOA among gear and operational sectors. NMFS also allocates the Pacific cod TACs annually between the inshore (90 percent) and offshore (10 percent) components in the Eastern Regulatory Area of the GOA (§ 679.20(a)(6)(ii)). In the Central GOA, the Pacific cod TAC is apportioned seasonally first to vessels using jig gear, and then among catcher vessels (CVs) less than 50 feet in length overall using hook-and-line gear, CVs equal to or greater than 50 feet in length overall using hook-and-line gear, catcher/processors (C/Ps) using hook-and-line gear, CVs using trawl gear, C/Ps using trawl gear, and vessels using pot gear (§ 679.20(a)(12)(i)(B)). In the Western GOA, the Pacific cod TAC is apportioned seasonally first to vessels using jig gear, and then among CVs using hook-and-line gear, C/Ps using hook-and-line gear, CVs using trawl gear, C/Ps using trawl gear, and vessels using pot gear (§ 679.20(a)(12)(i)(A)). The overall seasonal apportionments in the Western and Central GOA are 60 percent of the annual TAC to the A season and 40 percent of the annual TAC to the B season.

Under § 679.20(a)(12)(ii), any overage or underage of the Pacific cod harvest by each sector from the A season will be subtracted from, or added to, the subsequent B season allowance. In addition, any portion of the hook-and-line, trawl, pot, or jig sector allocations that NMFS determines is likely to go unharvested by a sector may be reallocated to other sectors for harvest during the remainder of the fishery year.

Pursuant to § 679.20(a)(12)(i)(A) and (B), a portion of the annual Pacific cod TACs in the Western and Central GOA will be allocated to vessels with a Federal Fisheries Permit (FFP) that use jig gear before the remaining Western and Central GOA Pacific cod TACs are

apportioned among other non-jig sectors. In accordance with the FMP, the annual jig sector allocations may increase to up to 6 percent of the annual Western and Central GOA Pacific cod TACs, depending on the annual performance of the jig sector (see Table 1 of Amendment 83 to the FMP for a detailed discussion of the jig sector allocation process (76 FR 74670, December 1, 2011)). Jig sector allocation increases are established for a minimum of two years. NMFS has evaluated the 2017 harvest performance of the jig sector in the Western and Central GOA, and is establishing the 2018 and 2019 Pacific cod apportionments to this sector as follows.

NMFS allocates the jig sector 1.5 percent of the annual Pacific cod TAC in the Western GOA. This is a decrease from the 2017 jig sector allocation of 2.5 percent because in 2016 and 2017 this sector harvested less than 90 percent of its initial annual allocation, thus triggering the deduction of the 1.0 percent performance increase that the Western GOA jig sector received in 2017. The 2018 and 2019 allocations consist of a base allocation of 1.5 percent of the Western GOA Pacific cod TAC, and no additional performance increase in the Western GOA.

NMFS allocates the jig sector 1.0 percent of the annual Pacific cod TAC in the Central GOA. This is the same percent as the 2017 jig sector allocation because in 2017 this sector harvested less than 90 percent of its initial annual allocation. The 2018 and 2019 allocations consist of a base allocation of 1.0 percent of the Central GOA Pacific cod TAC, and no additional performance increase in the Central GOA.

Tables 5 and 6 list the seasonal apportionments and allocations of the 2018 and 2019 Pacific cod TACs.

Table 5. Final 2018 Seasonal Apportionments and Allocation of Pacific Cod Total Allowable Catch Amounts in the GOA; Allocations for the Western GOA and Central GOA Sectors and the Eastern GOA Inshore and Offshore Processing Components (Values are rounded to the nearest metric ton and percentages to the nearest 0.01. Seasonal allowances may not total precisely to annual allocation amount.)

Regulatory area and sector	Annual allocation (mt)	A Season		B Season	
		Sector percentage of annual non-jig TAC	Seasonal allowances (mt)	Sector percentage of annual non-jig TAC	Seasonal allowances (mt)
Western GOA					
Jig (1.5 % of TAC)	85	N/A	51	N/A	34
Hook-and-line CV	78	0.70	39	0.70	39
Hook-and-line C/P	1,103	10.90	607	8.90	496
Trawl CV	2,140	27.70	1,543	10.70	596
Trawl C/P	134	0.90	50	1.50	84
All Pot CV and Pot C/P	2,117	19.80	1,103	18.20	1,014
Total	5,657	60.00	3,394	40.00	2,263
Central GOA					
Jig (1.0% of TAC)	61	N/A	37	N/A	24
Hook-and-line < 50 CV	880	9.32	562	5.29	319
Hook-and-line ≥ 50 CV	404	5.61	338	1.10	66
Hook-and-line C/P	308	4.11	248	1.00	60
Trawl CV ¹	2,507	21.14	1,274	20.45	1,233
Trawl C/P	253	2.00	121	2.19	132
All Pot CV and Pot C/P	1,676	17.83	1,075	9.97	601
Total	6,089	60.00	3,653	40.00	2,436
Eastern GOA		Inshore (90% of Annual TAC)		Offshore (10% of Annual TAC)	
	1,350	1,215		135	

¹ Trawl vessels participating in Rockfish Program cooperatives receive 3.81 percent, or 232 mt, of the annual Central GOA TAC (see Table 28c to 50 CFR part 679), which is deducted from the Trawl CV B season allowance (see Table 12. Final 2018 Apportionments of Rockfish Secondary Species in the Central GOA and Table 28c to 50 CFR part 679).

Table 6. Final 2019 Seasonal Apportionments and Allocation of Pacific Cod Total Allowable Catch Amounts in the GOA; Allocations for the Western GOA and Central GOA Sectors and the Eastern GOA Inshore and Offshore Processing Components (Values are rounded to the nearest metric ton and percentages to the nearest 0.01. Seasonal allowances may not total precisely to annual allocation amount).

Regulatory area and sector	Annual allocation (mt)	A Season		B Season	
		Sector percentage of annual non-jig TAC	Seasonal allowances (mt)	Sector percentage of annual non-jig TAC	Seasonal allowances (mt)
Western GOA					
Jig (1.5 % of TAC)	134	N/A	80	N/A	53
Hook-and-line CV	73	0.70	36	0.70	36
Hook-and-line C/P	1,031	10.90	568	8.90	464
Trawl CV	2,000	27.70	1,443	10.70	557
Trawl C/P	125	0.90	47	1.50	78
All Pot CV and Pot C/P	1,980	19.80	1,031	18.20	948
Total	5,343	60.00	3,206	40.00	2,137
Central GOA					
Jig (1.0% of TAC)	58	N/A	35	N/A	23
Hook-and-line < 50 CV	831	9.32	530	5.29	301
Hook-and-line ≥ 50 CV	382	5.61	319	1.10	62
Hook-and-line C/P	291	4.11	234	1.00	57
Trawl CV ¹	2,367	21.14	1,203	20.45	1,164
Trawl C/P	239	2.00	114	2.19	125
All Pot CV and Pot C/P	1,583	17.83	1,015	9.97	568
Total	5,750	60.00	3,450	40.00	2,300
Eastern GOA		Inshore (90% of Annual TAC)		Offshore (10% of Annual TAC)	
	1,275	1,148		128	

¹ Trawl vessels participating in Rockfish Program cooperatives receive 3.81 percent, or 219 mt, of the annual Central GOA TAC (see Table 28c to 50 CFR part 679), which is deducted from the Trawl CV B season allowance (see Table 13. Final 2019 Apportionments of Rockfish Secondary Species in the Central GOA and Table 28c to 50 CFR part 679).

Allocations of the Sablefish TACs Amounts to Vessels Using Fixed and Trawl Gear

Section 679.20(a)(4)(i) and (ii) require allocations of sablefish TACs for each of the regulatory areas and districts to fixed and trawl gear. In the Western and Central Regulatory Areas, 80 percent of each TAC is allocated to fixed gear, and 20 percent of each TAC is allocated to trawl gear. In the Eastern Regulatory Area, which is comprised of the WYK and SEO Districts, 95 percent of the TAC is allocated to fixed gear, and 5 percent is allocated to trawl gear. The trawl gear allocation in the Eastern Regulatory Area may only be used to support incidental catch of sablefish in directed trawl fisheries for other target species (§ 679.20(a)(4)(i)).

In recognition of the prohibition against trawl gear in the SEO District of the Eastern Regulatory Area, the Council recommended and NMFS approves the allocation of 5 percent of the Eastern Regulatory Area sablefish TAC to trawl gear in the WYK District, making the remainder of the WYK sablefish TAC available to vessels using fixed gear. NMFS allocates 100 percent of the sablefish TAC in the SEO District to vessels using fixed gear. This action results in a 2018 allocation of 240 mt to trawl gear and 1,589 mt to fixed gear in the WYK District, a 2018 allocation of 2,974 mt to fixed gear in the SEO District, and a 2019 allocation of 338 mt to trawl gear in the WYK District. Table 7 lists the allocations of the 2018 sablefish TACs to fixed and trawl gear. Table 8 lists the allocations of the 2019 sablefish TACs to trawl gear.

The Council recommended that a trawl sablefish TAC be established for two years so that retention of incidental catch of sablefish by trawl gear could commence in January in the second year of the groundfish harvest specifications. Both the 2018 and 2019 trawl allocations are specified in these final harvest specifications, in Tables 7 and 8, respectively.

The Council also recommended that the fixed gear sablefish TAC be established annually to ensure that this IFQ fishery is conducted concurrently with the halibut IFQ fishery and is

based on the most recent sablefish survey information. Since there is an annual assessment for sablefish and since the final harvest specifications are expected to be published before the IFQ season begins on March 24, 2018, the Council recommended that the fixed gear sablefish TAC be set on an annual basis, rather than for two years, so that the best scientific information available could be considered in establishing the sablefish ABCs and TACs. Accordingly, while the 2018 fixed gear allocations are specified in Table 7, the 2019 fixed gear allocations are not specified in Table 8 and will be specified in the 2019 and 2020 harvest specifications.

With the exception of the trawl allocations that were provided to the Central GOA Rockfish Program (Rockfish Program) cooperatives (see Table 28c to 50 CFR part 679), directed fishing for sablefish with trawl gear in the GOA is closed during the fishing year. Also, fishing for groundfish with trawl gear is prohibited prior to January 20 (§ 679.23(c)). Therefore, it is not likely that the sablefish allocation to trawl gear would be reached before the effective date of the final 2018 and 2019 harvest specifications.

Table 7. Final 2018 Sablefish TAC Specifications in the GOA and Allocations to Fixed and Trawl Gear (Values are rounded to the nearest metric ton).

Area/District	TAC	Fixed gear allocation	Trawl gear allocation
Western	1,544	1,235	309
Central	5,158	4,126	1,032
West Yakutat ¹	1,829	1,589	240
Southeast Outside	2,974	2,974	0
Total	11,505	9,924	1,581

¹ The trawl allocation is based on allocating 5 percent of the combined Eastern Regulatory Area (West Yakutat and Southeast Outside Districts) sablefish TAC to trawl gear in the West Yakutat District.

Table 8. Final 2019 Sablefish TAC Specifications in the GOA and Allocation to Trawl Gear¹ (Values are rounded to the nearest metric ton).

Area/District	TAC	Fixed gear allocation	Trawl gear allocation
Western	2,174	n/a	435
Central	7,260	n/a	1,452
West Yakutat ²	2,573	n/a	338
Southeast Outside	4,187	n/a	0
Total	16,194	n/a	2,225

¹ The Council recommended that the 2018 (but not the 2019) harvest specifications for the fixed gear sablefish Individual Fishing Quota fisheries be specified in the final 2018 and 2019 harvest specifications.

² The trawl allocation is based on allocating 5 percent of the combined Eastern Regulatory Area (West Yakutat and Southeast Outside Districts) sablefish TAC to trawl gear in the West Yakutat District.

Demersal Shelf Rockfish (DSR)

The recommended 2018 and 2019 DSR TAC is 250 mt, and management of DSR is delegated to the State. The Alaska Board of Fisheries has apportioned the annual SEO District DSR TACs between the commercial fishery (84 percent) and the sport fishery (16 percent) after deductions were made for anticipated subsistence harvests (7 mt). This results in 2018 and 2019 allocations of 204 mt to the commercial fishery and 39 mt to the sport fishery.

The State deducts estimates of incidental catch of DSR in the commercial halibut fishery and pre-season “test fishery” DSR mortality from the DSR commercial fishery allocation. For example, in 2017, this resulted in 27 mt being available for the directed commercial DSR fishery apportioned in one DSR district. The State estimated that there was not sufficient DSR TAC available to have orderly fisheries in the three other DSR districts. DSR harvest in the halibut fishery is linked to the annual halibut catch limits; therefore, the State can only estimate potential DSR incidental catch because halibut catch limits are established by the International Pacific Halibut Commission (IPHC). For 2018 and 2019, the State will determine from the available DSR TAC of 250 mt the allocation available for the directed commercial DSR fishery in the DSR districts.

Federally permitted CVs using hook-and-line or jig gear fishing for groundfish and Pacific halibut in the SEO District of the GOA are required to retain all DSR (§ 679.20(j)).

Apportionments to the Rockfish Program

These final 2018 and 2019 harvest specifications for the GOA include the fishery cooperative allocations and sideboard limitations established by the Rockfish Program. Program participants are primarily trawl CVs and trawl C/Ps, with limited participation by vessels using longline gear. The Rockfish Program assigns quota share and cooperative quota to participants for primary (Pacific ocean perch, northern rockfish, and dusky rockfish) and secondary species (Pacific cod, rougheye and blackspotted rockfish, sablefish, shortraker rockfish, and thornyhead rockfish); allows a participant holding a license limitation program (LLP) license with rockfish quota share to form a rockfish cooperative with other persons; and allows holders of C/P LLP licenses to opt out of the fishery. The Rockfish Program also has an entry level fishery for rockfish primary species for vessels using longline gear. Longline gear includes hook-and-line, jig, troll, and handline gear.

Under the Rockfish Program, rockfish primary species in the Central GOA are allocated to participants after deducting for incidental catch needs in other directed groundfish fisheries (§ 679.81(a)(2)). Participants in the Rockfish Program also receive a portion of the Central GOA TAC of specific secondary species. In addition to groundfish species, the Rockfish Program allocates a portion of the halibut PSC limit (191 mt) from the third season deep-water species fishery allowance for the GOA trawl fisheries to Rockfish Program participants (§ 679.81(d) and Table 28d to 50 CFR part 679). Also, the Rockfish Program establishes sideboard limits to restrict the ability of harvesters operating under the Rockfish Program to increase their participation in other, non-Rockfish Program fisheries. These restrictions, as well as halibut PSC

limits, are discussed in a subsequent section in this rule titled “Rockfish Program Groundfish Sideboard and Halibut PSC Limitations.”

Section 679.81(a)(2)(ii) and Table 28e to 50 CFR part 679 require allocations of 5 mt of Pacific ocean perch, 5 mt of northern rockfish, and 50 mt of dusky rockfish to the entry level longline fishery in 2018 and 2019. The allocation of each primary species for the entry level longline fishery may increase incrementally each year if the catch exceeds 90 percent of the allocation of that species. The incremental increase in the allocation would continue each year until it reaches the maximum percent of the TAC that may be allocated to the rockfish entry level longline fishery for that species. In 2017, the catch of Pacific ocean perch, northern rockfish, and dusky rockfish did not attain the 90 percent threshold, and those allocations for 2018 do not increase above the 2017 allocations. The remainder of the TACs for the rockfish primary species would be allocated to the CV and C/P cooperatives. Table 9 lists the allocations of the 2018 and 2019 TACs for each rockfish primary species to the entry level longline fishery, the potential incremental increases for future years, and the maximum percent of the TACs assigned to the Rockfish Program that may be allocated to the rockfish entry level longline fishery.

Table 9. Final 2018 and Initial 2019 Allocations of Rockfish Primary Species to the Entry Level Longline Fishery in the Central Gulf of Alaska.

Rockfish primary species	2018 and 2019 allocations	Incremental increase in 2019 if > 90% of 2018 allocation is harvested	Up to maximum % of TAC
Pacific ocean perch	5 metric tons	5 metric tons	1%
Northern rockfish	5 metric tons	5 metric tons	2%
Dusky rockfish	50 metric tons	20 metric tons	5%

Section 679.81 requires allocations of the rockfish primary species among various sectors of the Rockfish Program. Tables 10 and 11 list the final 2018 and 2019 allocations of rockfish primary species in the Central GOA to the entry level longline fishery, and CV and C/P cooperatives in the Rockfish Program. NMFS also is setting aside incidental catch amounts (ICAs) for other directed fisheries in the Central GOA of 4,000 mt of Pacific ocean perch, 300 mt of northern rockfish, and 250 mt of dusky rockfish. These amounts are based on recent average incidental catches in the Central GOA by other groundfish fisheries.

Allocations among vessels belonging to CV or C/P cooperatives are not included in these final harvest specifications. Rockfish Program applications for CV cooperatives and C/P cooperatives are not due to NMFS until March 1 of each calendar year; therefore, NMFS cannot calculate 2018 and 2019 allocations in conjunction with these final harvest specifications. NMFS will post these allocations on the Alaska Region Web site at <http://alaskafisheries.noaa.gov/fisheries/central-goa-rockfish-program> when they become available after March 1.

Table 10. Final 2018 Allocations of Rockfish Primary Species in the Central Gulf of Alaska to the Entry Level Longline Fishery and Rockfish Cooperatives in the Rockfish Program (Values are rounded to the nearest metric ton).

Rockfish Primary Species	TAC	Incidental catch allowance	TAC minus ICA	Allocation to the entry level longline ¹ fishery	Allocation to the Rockfish cooperatives ²
Pacific ocean perch	20,112	4,000	16,112	5	16,107
Northern rockfish	3,261	300	2,961	5	2,956
Dusky rockfish	3,502	250	3,252	50	3,202
Total	26,875	4,050	22,825	60	22,265

¹ Longline gear includes hook-and-line, jig, troll, and handline gear (50 CFR 679.2).

² Rockfish cooperatives include vessels in CV and C/P cooperatives (50 CFR 679.81).

Table 11. Final 2019 Allocations of Rockfish Primary Species in the Central Gulf of Alaska to the Entry Level Longline Fishery and Rockfish Cooperatives in the Rockfish Program (Values are rounded to the nearest metric ton).

Rockfish Primary Species	TAC	Incidental catch allowance	TAC minus ICA	Allocation to the entry level longline ¹ fishery	Allocation to the Rockfish cooperatives ²
Pacific ocean perch	19,678	4,000	15,678	5	15,673
Northern rockfish	2,965	300	2,665	5	2,660
Dusky rockfish	3,246	250	2,996	50	2,946
Total	25,889	4,050	21,839	60	21,279

¹ Longline gear includes hook-and-line, jig, troll, and handline gear (50 CFR 679.2).

² Rockfish cooperatives include vessels in CV and C/P cooperatives (50 CFR 679.81).

Section 679.81(c) and Table 28c to 50 CFR part 679 requires allocations of rockfish secondary species to CV and C/P cooperatives in the Central GOA. CV cooperatives receive allocations of Pacific cod, sablefish from the trawl gear allocation, and thornyhead rockfish. C/P cooperatives receive allocations of sablefish from the trawl gear allocation, rougheye and blackspotted rockfish, shortraker rockfish, and thornyhead rockfish. Tables 12 and 13 list the apportionments of the 2018 and 2019 TACs of rockfish secondary species in the Central GOA to CV and C/P cooperatives.

Table 12. Final 2018 Apportionments of Rockfish Secondary Species in the Central GOA to Catcher Vessel and Catcher/Processor Cooperatives (Values are rounded to the nearest metric ton).

Rockfish Secondary Species	Annual Central GOA TAC	Catcher vessel cooperatives		Catcher/Processor cooperatives	
		Percentage of TAC	Apportionment (mt)	Percentage of TAC	Apportionment (mt)
Pacific cod	6,089	3.81%	232	0.00%	0
Sablefish	5,158	6.78%	350	3.51%	181
Shortraker rockfish	305	0.00%	0	40.00%	122
Rougheye rockfish	556	0.00%	0	58.87%	327
Thornyhead rockfish	921	7.84%	72	26.50%	244

Table 13. Final 2019 Apportionments of Rockfish Secondary Species in the Central GOA to Catcher Vessel and Catcher/Processor Cooperatives (Values are rounded to the nearest metric ton).

Rockfish Secondary Species	Annual Central GOA TAC	Catcher Vessel cooperatives		Catcher/Processor cooperatives	
		Percentage of TAC	Apportionment (mt)	Percentage of TAC	Apportionment (mt)
Pacific cod	5,750	3.81%	219	0.00%	0
Sablefish	7,260	6.78%	492	3.51%	255
Shortraker rockfish	305	0.00%	0	40.00%	122
Rougheye rockfish	550	0.00%	0	58.87%	324
Thornyhead rockfish	921	7.84%	72	26.50%	244

Halibut PSC Limits

Section 679.21(d) establishes the annual halibut PSC limit apportionments for trawl gear and hook-and-line gear, and authorizes the establishment of apportionments for pot gear. In December 2017, the Council recommended halibut PSC limits of 1,706 mt for trawl gear, 257 mt for hook-and-line gear, and 9 mt for the DSR fishery in the SEO District for both 2018 and 2019.

The DSR fishery in the SEO District is defined at § 679.21(d)(2)(ii)(A). This fishery is apportioned 9 mt of the halibut PSC limit in recognition of its small-scale harvests of groundfish (§ 679.21(d)(2)(i)(A)). The separate halibut PSC limit for the DSR fishery is intended to prevent that fishery from being impacted from the halibut PSC incurred by other GOA fisheries. NMFS estimates low halibut bycatch in the DSR fishery because 1) the duration of the DSR fisheries and the gear soak times are short, 2) the DSR fishery occurs in the winter when there is less overlap in the distribution of DSR and halibut, and 3) the directed commercial DSR fishery has a low DSR TAC.

The FMP authorizes the Council to exempt specific gear from the halibut PSC limits. NMFS, after consultation with the Council, exempts pot gear, jig gear, and the sablefish IFQ hook-and-line gear fishery categories from the non-trawl halibut PSC limit for 2018 and 2019. The Council recommended, and NMFS approves, these exemptions because: 1) the pot gear fisheries have low annual halibut bycatch mortality, 2) IFQ program regulations prohibit discard of halibut if any halibut IFQ permit holder on board a catcher vessel holds unused halibut IFQ for that vessel category and the IFQ regulatory area in which the vessel is operating (§ 679.7(f)(11)), 3) some sablefish IFQ fishermen hold halibut IFQ permits and are therefore required to retain the halibut they catch while fishing sablefish IFQ, and 4) NMFS estimates negligible halibut mortality for the jig gear fisheries. NMFS estimates that halibut mortality is

negligible in the jig gear fisheries given the small amount of groundfish harvested by jig gear, the selective nature of jig gear, and the high survival rates of halibut caught and released with jig gear.

The best available information on estimated halibut bycatch consists of data collected by fisheries observers during 2017. The calculated halibut bycatch mortality through December 9, 2017, is 1,214 mt for trawl gear and 169 mt for hook-and-line gear for a total halibut mortality of 1,383 mt. This halibut mortality was calculated using groundfish and halibut catch data from the NMFS Alaska Region's catch accounting system. This accounting system contains historical and recent catch information compiled from each Alaska groundfish fishery.

Section 679.21(d)(4)(i) and (ii) authorizes NMFS to seasonally apportion the halibut PSC limits after consultation with the Council. The FMP and regulations require the Council and NMFS to consider the following information in seasonally apportioning halibut PSC limits: 1) seasonal distribution of halibut; 2) seasonal distribution of target groundfish species relative to halibut distribution; 3) expected halibut bycatch needs on a seasonal basis relative to changes in halibut biomass and expected catch of target groundfish species; 4) expected bycatch rates on a seasonal basis; 5) expected changes in directed groundfish fishing seasons; 6) expected actual start of fishing effort; and 7) economic effects of establishing seasonal halibut allocations on segments of the target groundfish industry. The Council considered information from the 2017 SAFE report, NMFS catch data, State of Alaska catch data, IPHC stock assessment and mortality data, and public testimony when apportioning the halibut PSC limits. NMFS concurs with the Council's recommendations listed in Table 14, which show the final 2018 and 2019 Pacific halibut PSC limits, allowances, and apportionments.

Section 679.21(d)(4)(iii) and (iv) specify that any underages or overages of a seasonal apportionment of a halibut PSC limit will be added to or deducted from the next respective seasonal apportionment within the fishing year.

Table 14. Final 2018 and 2019 Pacific Halibut PSC Limits, Allowances, and Apportionments (Values are in metric tons).

Trawl gear			Hook-and-line gear ¹				
			Other than DSR			DSR	
Season	Percent	Amount	Season	Percent	Amount	Season	Amount
January 20 - April 1	27.5%	469	January 1 - June 10	86%	221	January 1 - December 31	9
April 1 - July 1	20%	341	June 10 - September 1	2%	5		
July 1 - September 1	30%	512	September 1 - December 31	12%	31		
September 1 - October 1	7.5%	128					
October 1 - December 31	15%	256					
Total		1,706			257		9

¹ The Pacific halibut prohibited species catch (PSC) limit for hook-and-line gear is allocated to the demersal shelf rockfish (DSR) fishery in the SEO District and to the hook-and-line fisheries other than the DSR fishery. The hook-and-line sablefish IFQ fishery is exempt from halibut PSC limits, as are pot and jig gear for all groundfish fisheries. Note: Seasonal or sector apportionments may not total precisely due to rounding.

Section 679.21(d)(3)(ii) authorizes further apportionment of the trawl halibut PSC limit to trawl fishery categories listed in § 679.21(d)(3)(iii). The annual apportionments are based on each category's proportional share of the anticipated halibut bycatch mortality during the fishing year and optimization of the total amount of groundfish harvest under the halibut PSC limit. The fishery categories for the trawl halibut PSC limits are: 1) a deep-water species fishery, composed of sablefish, rockfish, deep-water flatfish, rex sole, and arrowtooth flounder; and 2) a shallow-water species fishery, composed of pollock, Pacific cod, shallow-water flatfish, flathead sole, Atka mackerel, and "other species" (sculpins, sharks, squids, and octopuses)

(§ 679.21(d)(3)(iii)). Halibut mortality incurred while directed fishing for skates with trawl gear accrues towards the shallow-water fishery halibut PSC limit (69 FR 26320, May 12, 2004).

NMFS will combine available trawl halibut PSC limit apportionments on May 15 during the second season deep-water and shallow-water fisheries for use in either fishery from May 15 through June 30 (§ 679.21(d)(4)(iii)(D)). This is intended to maintain groundfish harvest while minimizing halibut bycatch by these sectors to the extent practicable. This provides the deep-water and shallow-water trawl fisheries additional flexibility and the incentive to participate in fisheries at times of the year that may have lower halibut PSC rates relative to other times of the year.

Table 15 lists the final 2018 and 2019 apportionments of halibut PSC trawl limits between the trawl gear deep-water and shallow-water species fishery categories.

Table 28d to 50 CFR part 679 specifies the amount of the trawl halibut PSC limit that is assigned to the CV and C/P sectors that are participating in the Rockfish Program. This includes 117 mt of halibut PSC limit to the CV sector and 74 mt of halibut PSC limit to the C/P sector. These amounts are allocated from the trawl deep-water species fishery's halibut PSC third seasonal apportionment. After the combined CV and C/P halibut PSC limit allocation of 191 mt to the Rockfish Program, 150 mt remains for the trawl deep-water species fishery's halibut PSC third seasonal apportionment.

Section 679.21(d)(4)(iii)(B) limits the amount of the halibut PSC limit allocated to Rockfish Program participants that could be re-apportioned to the general GOA trawl fisheries during the current fishing year to no more than 55 percent of the unused annual halibut PSC limit apportioned to Rockfish Program participants. The remainder of the unused Rockfish Program

halibut PSC limit is unavailable for use by any person for the remainder of the fishing year (§ 679.21(d)(4)(iii)(C)).

Table 15. Final 2018 and 2019 Apportionment of Pacific Halibut PSC Trawl Limits Between the Trawl Gear Deep-Water Species Fishery and the Shallow-Water Species Fishery Categories (Values are in metric tons).

Season	Shallow-water	Deep-water ¹	Total
January 20 - April 1	384	85	469
April 1 - July 1	85	256	341
July 1 - September 1	171	341	512
September 1 - October 1	128	Any remainder	128
Subtotal January 20 - October 1	768	682	1,450
October 1 - December 31 ²			256
Total			1,706

¹ Vessels participating in cooperatives in the Central GOA Rockfish Program will receive 191 mt of the third season (July 1 through September 1) deep-water species fishery halibut PSC apportionment.

² There is no apportionment between trawl shallow-water and deep-water species fishery categories during the fifth season (October 1 through December 31).

Section 679.21(d)(2)(i)(B) requires that the “other hook-and-line fishery” halibut PSC limit apportionment to vessels using hook-and-line gear must be apportioned between CVs and C/Ps in accordance with § 679.21(d)(2)(iii) in conjunction with these harvest specifications. A comprehensive description and example of the calculations necessary to apportion the “other hook-and-line fishery” halibut PSC limit between the hook-and-line CV and C/P sectors were included in the proposed rule to implement Amendment 83 to the FMP (76 FR 44700, July 26, 2011) and are not repeated here.

Pursuant to § 679.21(d)(2)(iii), the hook-and-line halibut PSC limit for the “other hook-and-line fishery” is apportioned between the CV and C/P sectors in proportion to the total Western and Central GOA Pacific cod allocations, which vary annually based on the proportion

of the Pacific cod biomass between the Western, Central, and Eastern GOA. Pacific cod is apportioned among these two management areas based on the percentage of overall biomass per area, as calculated in the 2016 Pacific cod stock assessment. Updated information in the final 2017 SAFE report describes this distributional calculation, which is based on allocating ABC among regulatory areas on the basis of the three most recent stock surveys. For 2018 and 2019, the distribution of the total GOA Pacific cod ABC is 45 percent to the Western GOA, 45 percent to the Central GOA, and 10 percent to the Eastern GOA. Therefore, the calculations made in accordance with § 679.21(d)(2)(iii) incorporate the most recent information on GOA Pacific cod distribution with respect to establishing the annual halibut PSC limits for the CV and C/P hook-and-line sectors. The annual halibut PSC limits for both the CV and C/P sectors of the “other hook-and-line fishery” are divided into three seasonal apportionments, using seasonal percentages of 86 percent, 2 percent, and 12 percent.

For 2018 and 2019, NMFS apportions halibut PSC limits of 120 mt and 137 mt to the hook-and-line CV and hook-and-line C/P sectors, respectively. Table 16 lists the final 2018 and 2019 apportionments of halibut PSC limits between the hook-and-line CV and the hook-and-line C/P sectors of the “other hook-and-line fishery.”

No later than November 1 of each year, NMFS will calculate the projected unused amount of halibut PSC limit by either of the CV or C/P hook-and-line sectors of the “other hook-and-line fishery” for the remainder of the year. The projected unused amount of halibut PSC limit is made available to the other hook-and-line sector for the remainder of that fishing year (§ 679.21(d)(2)(iii)(C)), if NMFS determines that an additional amount of halibut PSC is necessary for that sector to continue its directed fishing operations.

Table 16. Final 2018 and 2019 Apportionments of the “other hook-and-line fishery” Annual Halibut PSC Allowance between the Hook-and-Line Gear Catcher Vessel and Catcher/Processor Sectors (Values are in metric tons).

“Other than DSR” allowance	Hook-and-line sector	Sector annual amount	Season	Seasonal percentage	Sector seasonal amount
257	Catcher Vessel	120	January 1 - June 10	86	103
			June 10 - September 1	2	2
			September 1 - December 31	12	14
	Catcher/Processor	137	January 1 - June 10	86	118
			June 10 - September 1	2	3
			September 1 - December 31	12	16

Estimates of Halibut Biomass and Stock Condition

The IPHC annually assesses the abundance and potential yield of the Pacific halibut stock using all available data from the commercial and sport fisheries, other removals, and scientific surveys. Additional information on the Pacific halibut stock assessment may be found in the IPHC’s 2017 Pacific halibut stock assessment (December 2017), available on the IPHC Web site at www.iphc.int. The IPHC considered the 2017 Pacific halibut stock assessment at its January 2018 annual meeting when it set the 2018 commercial halibut fishery catch limits.

Halibut Discard Mortality Rates

To monitor halibut bycatch mortality allowances and apportionments, the Regional Administrator uses observed halibut incidental catch rates, halibut discard mortality rates (DMRs), and estimates of groundfish catch to project when a fishery’s halibut bycatch mortality allowance or seasonal apportionment is reached. Halibut incidental catch rates are based on observers’ estimates of halibut incidental catch in the groundfish fishery. DMRs are estimates of the proportion of incidentally caught halibut that do not survive after being returned to the sea.

The cumulative halibut mortality that accrues to a particular halibut PSC limit is the product of a DMR multiplied by the estimated halibut PSC. DMRs are estimated using the best scientific information available in conjunction with the annual GOA stock assessment process. The DMR methodology and findings are included as an appendix to the annual GOA groundfish SAFE report.

In 2016, the DMR estimation methodology underwent revisions per the Council's directive. An interagency halibut working group (IPHC, Council, and NMFS staff) developed improved estimation methods that have undergone review by the GOA Plan Team, SSC, and the Council. A summary of the revised methodology is contained in the GOA proposed 2017 and 2018 harvest specifications (81 FR 87881, December 6, 2016), and the comprehensive discussion of the working group's statistical methodology is available from the Council (see **ADDRESSES**). The DMR working group's revised methodology is intended to improve estimation accuracy, as well as transparency and transferability in the methodology used, for calculating DMRs. The working group will continue to consider improvements to the methodology used to calculate halibut mortality, including potential changes to the reference period (the period of data used for calculating the DMRs). Future DMRs, including the 2019 DMRs, may change based on an additional year of observer sampling, which could provide more recent and accurate data and which could improve the accuracy of estimation and progress on methodology. The new methodology will continue to ensure that NMFS is using DMRs that more accurately reflect halibut mortality, which will inform the different sectors of their estimated halibut mortality and allow specific sectors to respond with methods that could reduce mortality and, eventually, the DMR for that sector.

At the December 2017 meeting, the SSC, AP, and Council concurred with the revised DMR estimation methodology, and NMFS adopted for 2018 and 2019 the DMRs calculated under the revised methodology. The final 2018 and 2019 DMRs in this rule are unchanged from the DMRs in the proposed 2018 and 2019 harvest specifications (82 FR 57924, December 8, 2017). Table 17 lists these final 2018 and 2019 DMRs.

Table 17. Final 2018 and 2019 Halibut Discard Mortality Rates for Vessels Fishing in the Gulf of Alaska (Values are percent of halibut assumed to be dead).

Gear	Sector	Groundfish fishery	Halibut discard mortality rate (percent)
Pelagic trawl	Catcher vessel	All	100
	Catcher/processor	All	100
Non-pelagic trawl	Catcher vessel	Rockfish Program	62
	Catcher vessel	All others	67
	Mothership and catcher/processor	All	84
Hook-and-line	Catcher/processor	All	10
	Catcher vessel	All	17
Pot	Catcher vessel and catcher/processor	All	7

Chinook Salmon Prohibited Species Catch Limits

Amendment 93 to the FMP (77 FR 42629, July 20, 2012) established separate Chinook salmon PSC limits in the Western and Central GOA in the directed pollock trawl fishery. These limits require NMFS to close the pollock directed fishery in the Western and Central Regulatory Areas of the GOA if the applicable Chinook salmon PSC limit in that regulatory area is reached (§ 679.21(h)(8)). The annual Chinook salmon PSC limits in the pollock directed fishery of 6,684 salmon in the Western GOA and 18,316 salmon in the Central GOA are set at § 679.21(h)(2)(i) and (ii).

Amendment 97 to the FMP (79 FR 71350, December 2, 2014) established an initial annual PSC limit of 7,500 Chinook salmon for the trawl non-pollock groundfish fisheries in the

Western and Central GOA. This limit is apportioned among three sectors directed fishing for groundfish species other than pollock: 3,600 Chinook salmon to trawl C/Ps; 1,200 Chinook salmon to trawl CVs participating in the Rockfish Program; and 2,700 Chinook salmon to trawl CVs not participating in the Rockfish Program (§ 679.21(h)(4)). NMFS will monitor the Chinook salmon PSC in the non-pollock GOA groundfish fisheries and close an applicable sector if it reaches its Chinook salmon PSC limit.

The Chinook salmon PSC limit for two sectors, trawl C/Ps and trawl CVs not participating in the Rockfish Program, may be increased in subsequent years based on the performance of these two sectors and their ability to minimize their use of their respective Chinook salmon PSC limits. If either or both of these two sectors limits its use of Chinook salmon PSC to a specified threshold amount in 2017 (3,120 for trawl C/Ps and 2,340 for trawl CVs), that sector will receive an incremental increase to its 2018 Chinook salmon PSC limit (§ 679.21(h)(4)). In 2017, the trawl C/P sector did not exceed 3,120 Chinook salmon PSC; therefore, the 2018 trawl C/P sector Chinook salmon PSC limit will be 4,080 Chinook salmon. In 2017, the Non-Rockfish Program CV sector did not exceed 2,340 Chinook salmon PSC; therefore, the 2018 Non-Rockfish Program CV sector limit will be 3,060 Chinook salmon.

American Fisheries Act (AFA) Catcher/Processor and Catcher Vessel Groundfish Harvest and PSC Limits

Section 679.64 establishes groundfish harvesting and processing sideboard limitations on AFA C/Ps and CVs in the GOA. These sideboard limits are necessary to protect the interests of fishermen and processors who do not directly benefit from the AFA from those fishermen and processors who receive exclusive harvesting and processing privileges under the AFA. Section 679.7(k)(1)(ii) prohibits listed AFA C/Ps and C/Ps designated on a listed AFA C/P permit from

harvesting any species of groundfish in the GOA. Additionally, § 679.7(k)(1)(iv) prohibits listed AFA C/Ps and C/Ps designated on a listed AFA C/P permit from processing any pollock harvested in a directed pollock fishery in the GOA and any groundfish harvested in Statistical Area 630 of the GOA.

AFA CVs that are less than 125 feet (38.1 meters) length overall, have annual landings of pollock in the Bering Sea and Aleutian Islands less than 5,100 mt, and have made at least 40 GOA groundfish landings from 1995 through 1997 are exempt from GOA CV groundfish sideboard limits under § 679.64(b)(2)(ii). Sideboard limits for non-exempt AFA CVs in the GOA are based on their traditional harvest levels of TAC in groundfish fisheries covered by the FMP. Section 679.64(b)(3)(iv) establishes the CV groundfish sideboard limitations in the GOA based on the aggregate retained catch of non-exempt AFA CVs of each sideboard species or species group from 1995 through 1997 divided by the sum of the TACs for that species or species group available to CVs over the same period.

Tables 18 and 19 list the final 2018 and 2019 groundfish sideboard limits for non-exempt AFA CVs. NMFS will deduct all targeted or incidental catch of sideboard species made by non-exempt AFA CVs from the sideboard limits listed in Tables 18 and 19.

Table 18. Final 2018 GOA Non-Exempt American Fisheries Act Catcher Vessel (CV) Groundfish Harvest Sideboard Limits (Values are rounded to the nearest metric ton).

Species	Apportionments by season/gear	Area/component	Ratio of 1995-1997 non-exempt AFA CV catch to 1995-1997 TAC	Final 2018 TACs	Final 2018 non-exempt AFA CV sideboard limit
Pollock	A Season January 20 – March 10	Shumagin (610)	0.6047	1,317	796
		Chirikof (620)	0.1167	27,314	3,188
		Kodiak (630)	0.2028	9,025	1,830
	B Season March 10 - May 31	Shumagin (610)	0.6047	1,317	796
		Chirikof (620)	0.1167	32,155	3,752
		Kodiak (630)	0.2028	4,184	848
	C Season August 25 - October 1	Shumagin (610)	0.6047	13,777	8,331
		Chirikof (620)	0.1167	10,013	1,169
		Kodiak (630)	0.2028	13,865	2,812
	D Season October 1 - November 1	Shumagin (610)	0.6047	13,777	8,331
		Chirikof (620)	0.1167	10,013	1,169
		Kodiak (630)	0.2028	13,865	2,812
	Annual	WYK (640)	0.3495	6,833	2,388
		SEO (650)	0.3495	8,773	3,066
Pacific cod	A Season ¹ January 1 - June 10	W	0.1331	3,394	452
		C	0.0692	3,653	253
	B Season ² September 1 - December 31	W	0.1331	2,263	301
		C	0.0692	2,436	169
	Annual	E inshore	0.0079	1,215	10
		E offshore	0.0078	135	1
Sablefish	Annual, trawl gear	W	0.0000	309	-
		C	0.0642	1,032	66
		E	0.0433	240	10
Shallow-water flatfish	Annual	W	0.0156	13,250	207
		C	0.0587	25,315	1,486
		E	0.0126	4,167	53
Deep-water flatfish	Annual	W	0.0000	413	-
		C	0.0647	3,400	220
		E	0.0128	5,571	71
Rex sole	Annual	W	0.0007	3,086	2
		C	0.0384	8,739	336
		E	0.0029	3,548	10
Arrowtooth flounder	Annual	W	0.0021	14,500	30
		C	0.0280	48,000	1,344

		E	0.0002	13,800	3
Flathead sole	Annual	W	0.0036	8,650	31
		C	0.0213	15,400	328
		E	0.0009	2,338	2
Pacific ocean perch	Annual	W	0.0023	3,312	8
		C	0.0748	20,112	1,504
		E	0.0466	5,812	271
Northern rockfish	Annual	W	0.0003	420	0
		C	0.0277	3,261	90
Shortraker rockfish	Annual	W	0.0000	44	-
		C	0.0218	305	7
		E	0.0110	515	6
Dusky rockfish	Annual	W	0.0001	146	0
		C	0.0000	3,502	-
		E	0.0067	309	2
Rougheye rockfish	Annual	W	0.0000	176	-
		C	0.0237	556	13
		E	0.0124	712	9
Demersal shelf rockfish	Annual	SEO	0.0020	250	1
Thornyhead rockfish	Annual	W	0.0280	344	10
		C	0.0280	921	26
		E	0.0280	773	22
Other rockfish	Annual	C	0.1699	1,737	295
		E	0.0000	568	-
Atka mackerel	Annual	Gulfwide	0.0309	3,000	93
Big skates	Annual	W	0.0063	504	3
		C	0.0063	1,774	11
		E	0.0063	570	4
Longnose skates	Annual	W	0.0063	149	1
		C	0.0063	2,804	18
		E	0.0063	619	4
Other skates	Annual	Gulfwide	0.0063	1,384	9
Sculpins	Annual	Gulfwide	0.0063	5,301	33
Sharks	Annual	Gulfwide	0.0063	4,514	28
Squids	Annual	Gulfwide	0.0063	1,137	7
Octopuses	Annual	Gulfwide	0.0063	975	6

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for trawl gear closes November 1.

Table 19. Final 2019 GOA Non-Exempt American Fisheries Act Catcher Vessel (CV) Groundfish Harvest Sideboard Limits (Values are rounded to the nearest metric ton).

Species	Apportionments by season/gear	Area/component	Ratio of 1995-1997 non-exempt AFA CV catch to 1995-1997 TAC	Final 2019 TACs	Final 2019 non-exempt AFA CV sideboard limit
Pollock	A Season January 20 - March 10	Shumagin (610)	0.6047	869	525
		Chirikof (620)	0.1167	18,025	2,103
		Kodiak (630)	0.2028	5,955	1,208
	B Season March 10 - May 31	Shumagin (610)	0.6047	869	525
		Chirikof (620)	0.1167	21,219	2,476
		Kodiak (630)	0.2028	2,761	560
	C Season August 25 - October 1	Shumagin (610)	0.6047	9,091	5,498
		Chirikof (620)	0.1167	6,608	771
		Kodiak (630)	0.2028	9,150	1,856
	D Season October 1 - November 1	Shumagin (610)	0.6047	9,091	5,498
		Chirikof (620)	0.1167	6,608	771
		Kodiak (630)	0.2028	9,150	1,856
	Annual	WYK (640)	0.3495	4,509	1,576
		SEO (650)	0.3495	8,773	3,066
Pacific cod	A Season ¹ January 1 - June 10	W	0.1331	3,206	427
		C	0.0692	3,450	239
	B Season ² September 1 - December 31	W	0.1331	2,137	284
		C	0.0692	2,300	159
	Annual	E inshore	0.0079	1,148	9
		E offshore	0.0078	128	1
Sablefish	Annual, trawl gear	W	0.0000	435	-
		C	0.0642	1,452	93
		E	0.0433	338	15
Shallow-water flatfish	Annual	W	0.0156	13,250	207
		C	0.0587	25,655	1,506
		E	0.0126	4,223	53
Deep-water flatfish	Annual	W	0.0000	416	-
		C	0.0647	3,442	223
		E	0.0128	5,640	72
Rex sole	Annual	W	0.0007	2,909	2
		C	0.0384	8,236	316
		E	0.0029	3,384	10
Arrowtooth flounder	Annual	W	0.0021	14,500	30
		C	0.0280	48,000	1,344
		E	0.0002	13,800	3
Flathead sole	Annual	W	0.0036	8,650	31

		C	0.0213	15,400	328
		E	0.0009	2,437	2
Pacific ocean perch	Annual	W	0.0023	3,240	7
		C	0.0748	19,678	1,472
		E	0.0466	5,687	265
Northern rockfish	Annual	W	0.0003	382	0
		C	0.0277	2,965	82
Shortraker rockfish	Annual	W	0.0000	44	-
		C	0.0218	305	7
		E	0.0110	515	6
Dusky rockfish	Annual	W	0.0001	135	0
		C	0.0000	3,246	-
		E	0.0067	287	2
Rougheye rockfish	Annual	W	0.0000	174	-
		C	0.0237	550	13
		E	0.0124	703	9
Demersal shelf rockfish	Annual	SEO	0.0020	250	1
Thornyhead rockfish	Annual	W	0.0280	344	10
		C	0.0280	921	26
		E	0.0280	773	22
Other rockfish	Annual	W/C	0.1699	1,737	295
		E	0.0000	568	-
Atka mackerel	Annual	Gulfwide	0.0309	3,000	93
Big skates	Annual	W	0.0063	504	3
		C	0.0063	1,774	11
		E	0.0063	570	4
Longnose skates	Annual	W	0.0063	149	1
		C	0.0063	2,804	18
		E	0.0063	619	4
Other skates	Annual	Gulfwide	0.0063	1,384	9
Sculpins	Annual	Gulfwide	0.0063	5,301	33
Sharks	Annual	Gulfwide	0.0063	4,514	28
Squids	Annual	Gulfwide	0.0063	1,137	7
Octopuses	Annual	Gulfwide	0.0063	975	6

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for trawl gear closes November 1.

Non-Exempt AFA Catcher Vessel Halibut PSC Limits

The halibut PSC sideboard limits for non-exempt AFA CVs in the GOA are based on the aggregate retained groundfish catch by non-exempt AFA CVs in each PSC target category from 1995 through 1997 divided by the retained catch of all vessels in that fishery from 1995 through 1997 (§ 679.64(b)(4)(ii)). Table 20 lists the final 2018 and 2019 non-exempt AFA CV halibut PSC limits for vessels using trawl gear in the GOA, respectively.

Table 20. Final 2018 and 2019 Non-Exempt AFA CV Halibut Prohibited Species Catch (PSC) Limits for Vessels Using Trawl Gear in the GOA (Values are rounded to nearest metric ton).

Season	Season dates	Target fishery	Ratio of 1995-1997 non-exempt AFA CV retained catch to total retained catch	2018 and 2019 PSC limit	2018 and 2019 non-exempt AFA CV PSC limit
1	January 20 - April 1	shallow-water	0.340	384	131
		deep-water	0.070	85	6
2	April 1 - July 1	shallow-water	0.340	85	29
		deep-water	0.070	256	18
3	July 1 - September 1	shallow-water	0.340	171	58
		deep-water	0.070	341	24
4	September 1 - October 1	shallow-water	0.340	128	44
		deep-water	0.070	0	0
5	October 1 - December 31	all targets	0.205	256	52
Annual		Total shallow-water			262
		Total deep-water			48
		Grand Total, all season and categories		1,706	362

Non-AFA Crab Vessel Groundfish Harvest Limitations

Section 680.22 establishes groundfish catch limits for vessels with a history of participation in the Bering Sea snow crab fishery to prevent these vessels from using the increased flexibility provided by the Crab Rationalization Program to expand their level of participation in the GOA groundfish fisheries. Sideboard limits restrict these vessels' catch to their collective historical landings in each GOA groundfish fishery (except the fixed-gear sablefish fishery). Sideboard limits also apply to catch made using an LLP license derived from the history of a restricted vessel, even if that LLP license is used on another vessel.

The basis for these sideboard limits is described in detail in the final rules implementing the major provisions of Amendments 18 and 19 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (Crab FMP) (70 FR 10174, March 2, 2005), Amendment 34 to the Crab FMP (76 FR 35772, June 20, 2011), Amendment 83 to the GOA FMP (76 FR 74670, December 1, 2011), and Amendment 45 to the Crab FMP (80 FR 28539, May 19, 2015).

Tables 21 and 22 list the final 2018 and 2019 groundfish sideboard limitations for non-AFA crab vessels. All targeted or incidental catch of sideboard species made by non-AFA crab vessels or associated LLP licenses will be deducted from these sideboard limits.

Table 21. Final 2018 GOA Non-American Fisheries Act Crab Vessel Groundfish Harvest Sideboard Limits (Values are rounded to the nearest metric ton).

Species	Season/gear	Area/component/ gear	Ratio of 1996- 2000 non-AFA crab vessel catch to 1996-2000 total harvest	Final 2018 TACs	Final 2018 non- AFA crab vessel sideboard limit
Pollock	A Season January 20 - March 10	Shumagin (610)	0.0098	1,317	13
		Chirikof (620)	0.0031	27,314	85
		Kodiak (630)	0.0002	9,025	2
	B Season	Shumagin (610)	0.0098	1,317	13

	March 10 - May 31	Chirikof (620)	0.0031	32,155	100
		Kodiak (630)	0.0002	4,184	1
	C Season August 25 - October 1	Shumagin (610)	0.0098	13,777	135
		Chirikof (620)	0.0031	10,013	31
		Kodiak (630)	0.0002	13,865	3
	D Season October 1 - November 1	Shumagin (610)	0.0098	13,777	135
		Chirikof (620)	0.0031	10,013	31
		Kodiak (630)	0.0002	13,865	3
	Annual	WYK (640)	0.0000	6,833	-
		SEO (650)	0.0000	8,773	-
Pacific cod	A Season ¹ January 1 - June 10	WG Jig	0.0000	3,394	-
		WG Hook-and-line CV	0.0004	3,394	1
		WG Pot CV	0.0997	3,394	338
		WG Pot C/P	0.0078	3,394	26
		WG Trawl CV	0.0007	3,394	2
		CG Jig	0.0000	3,653	-
		CG Hook-and-line CV	0.0001	3,653	0
		CG Pot CV	0.0474	3,653	173
		CG Pot C/P	0.0136	3,653	50
		CG Trawl CV	0.0012	3,653	4
	B Season ² September 1 - December 31	WG Jig	0.0000	2,263	-
		WG Hook-and-line CV	0.0004	2,263	1
		WG Pot CV	0.0997	2,263	226
		WG Pot C/P	0.0078	2,263	18
		WG Trawl CV	0.0007	2,263	2
		CG Jig	0.0000	2,436	-
		CG Hook-and-line CV	0.0001	2,436	0
		CG Pot CV	0.0474	2,436	115
		CG Pot C/P	0.0136	2,436	33
		CG Trawl CV	0.0012	2,436	3
	Annual	EG inshore	0.0110	1,215	13
		EG offshore	0.0000	135	-
Sablefish	Annual, trawl gear	W	0.0000	309	-
		C	0.0000	1,032	-
		E	0.0000	240	-
Shallow-water flatfish	Annual	W	0.0059	13,250	78
		C	0.0001	25,315	3
		E	0.0000	4,167	-
Deep-water	Annual	W	0.0035	413	1

flatfish		C	0.0000	3,400	-
		E	0.0000	5,571	-
Rex sole	Annual	W	0.0000	3,086	-
		C	0.0000	8,739	-
		E	0.0000	3,548	-
Arrowtooth flounder	Annual	W	0.0004	14,500	6
		C	0.0001	48,000	5
		E	0.0000	13,800	-
Flathead sole	Annual	W	0.0002	8,650	2
		C	0.0004	15,400	6
		E	0.0000	2,338	-
Pacific ocean perch	Annual	W	0.0000	3,312	-
		C	0.0000	20,112	-
		E	0.0000	5,812	-
Northern rockfish	Annual	W	0.0005	420	0
		C	0.0000	3,261	-
Shortraker rockfish	Annual	W	0.0013	44	0
		C	0.0012	305	0
		E	0.0009	515	0
Dusky rockfish	Annual	W	0.0017	146	0
		C	0.0000	3,502	-
		E	0.0000	309	-
Rougheye rockfish	Annual	W	0.0067	176	1
		C	0.0047	556	3
		E	0.0008	712	1
Demersal shelf rockfish	Annual	SEO	0.0000	250	-
Thornyhead rockfish	Annual	W	0.0047	344	2
		C	0.0066	921	6
		E	0.0045	773	3
Other rockfish	Annual	W/C	0.0033	1,737	6
		E	0.0000	568	-
Atka mackerel	Annual	Gulfwide	0.0000	3,000	-
Big skate	Annual	W	0.0392	504	20
		C	0.0159	1,774	28
		E	0.0000	570	-
Longnose skate	Annual	W	0.0392	149	6
		C	0.0159	2,804	45
		E	0.0000	619	-
Other skates	Annual	Gulfwide	0.0176	1,384	24
Sculpins	Annual	Gulfwide	0.0176	5,301	93
Sharks	Annual	Gulfwide	0.0176	4,514	79

Squids	Annual	Gulfwide	0.0176	1,137	20
Octopuses	Annual	Gulfwide	0.0176	975	17

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for jig gear opens June 10. The Pacific cod B season for trawl gear closes November 1.

Table 22. Final 2019 GOA Non-American Fisheries Act Crab Vessel Groundfish Harvest Sideboard Limits (Values are rounded to the nearest metric ton).

Species	Season/gear	Area/component/ gear	Ratio of 1996- 2000 non-AFA crab vessel catch to 1996-2000 total harvest	Final 2019 TACs	Final 2019 non- AFA crab vessel sideboard limit
Pollock	A Season January 20 - March 10	Shumagin (610)	0.0098	869	9
		Chirikof (620)	0.0031	18,025	56
		Kodiak (630)	0.0002	5,955	1
	B Season March 10 - May 31	Shumagin (610)	0.0098	869	9
		Chirikof (620)	0.0031	21,219	66
		Kodiak (630)	0.0002	2,761	1
	C Season August 25 - October 1	Shumagin (610)	0.0098	9,091	89
		Chirikof (620)	0.0031	6,608	20
		Kodiak (630)	0.0002	9,150	2
	D Season October 1 - November 1	Shumagin (610)	0.0098	9,091	89
		Chirikof (620)	0.0031	6,608	20
		Kodiak (630)	0.0002	9,150	2
	Annual	WYK (640)	0.0000	4,509	-
		SEO (650)	0.0000	8,773	-
Pacific cod	A Season ¹ January 1 - June 10	WG Jig	0.0000	3,206	-
		WG Hook-and-line CV	0.0004	3,206	1
		WG Pot CV	0.0997	3,206	320
		WG Pot C/P	0.0078	3,206	25
		WG Trawl CV	0.0007	3,206	2
		CG Jig	0.0000	3,450	-
		CG Hook-and-line CV	0.0001	3,450	0
		CG Pot CV	0.0474	3,450	164
		CG Pot C/P	0.0136	3,450	47
		CG Trawl CV	0.0012	3,450	4
	B Season ² September 1 - December 31	WG Jig	0.0000	2,137	-
		WG Hook-and-line CV	0.0004	2,137	1

		WG Pot CV	0.0997	2,137	213
		WG Pot C/P	0.0078	2,137	17
		WG Trawl CV	0.0007	2,137	1
		CG Jig	0.0000	2,300	-
		CG Hook-and-line CV	0.0001	2,300	0
		CG Pot CV	0.0474	2,300	109
		CG Pot C/P	0.0136	2,300	31
		CG Trawl CV	0.0012	2,300	3
	Annual	E inshore	0.0110	1,148	13
		E offshore	0.0000	128	-
Sablefish	Annual, trawl gear	W	0.0000	435	-
		C	0.0000	1,452	-
		E	0.0000	338	-
Shallow-water flatfish	Annual	W	0.0059	13,250	78
		C	0.0001	25,655	3
		E	0.0000	4,223	-
Deep-water flatfish	Annual	W	0.0035	416	1
		C	0.0000	3,442	-
		E	0.0000	5,640	-
Rex sole	Annual	W	0.0000	2,909	-
		C	0.0000	8,236	-
		E	0.0000	3,384	-
Arrowtooth flounder	Annual	W	0.0004	14,500	6
		C	0.0001	48,000	5
		E	0.0000	13,800	-
Flathead sole	Annual	W	0.0002	8,650	2
		C	0.0004	15,400	6
		E	0.0000	2,437	-
Pacific ocean perch	Annual	W	0.0000	3,240	-
		C	0.0000	19,678	-
		E	0.0000	5,687	-
Northern rockfish	Annual	W	0.0005	382	0
		C	0.0000	2,965	-
Shortraker rockfish	Annual	W	0.0013	44	0
		C	0.0012	305	0
		E	0.0009	515	0
Dusky rockfish	Annual	W	0.0017	135	0
		C	0.0000	3,246	-
		E	0.0000	287	-
Rougheye rockfish	Annual	W	0.0067	174	1
		C	0.0047	550	3
		E	0.0008	703	1

Demersal shelf rockfish	Annual	SEO	0.0000	250	-
Thornyhead rockfish	Annual	W	0.0047	344	2
		C	0.0066	921	6
		E	0.0045	773	3
Other rockfish	Annual	W/C	0.0033	1,737	6
		E	0.0000	568	-
Atka mackerel	Annual	Gulfwide	0.0000	3,000	-
Big skate	Annual	W	0.0392	504	20
		C	0.0159	1,774	28
		E	0.0000	570	-
Longnose skate	Annual	W	0.0392	149	6
		C	0.0159	2,804	45
		E	0.0000	619	-
Other skates	Annual	Gulfwide	0.0176	1,384	24
Sculpins	Annual	Gulfwide	0.0176	5,301	93
Sharks	Annual	Gulfwide	0.0176	4,514	79
Squids	Annual	Gulfwide	0.0176	1,137	20
Octopuses	Annual	Gulfwide	0.0176	975	17

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for jig gear opens June 10. The Pacific cod B season for trawl gear closes November 1.

Rockfish Program Groundfish Sideboard and Halibut PSC Limitations

The Rockfish Program establishes three classes of sideboard provisions: CV groundfish sideboard restrictions, C/P rockfish sideboard restrictions, and C/P opt-out vessel sideboard restrictions (§ 679.82(c)(1)). These sideboards are intended to limit the ability of rockfish harvesters to expand into other fisheries.

CVs participating in the Rockfish Program may not participate in directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat District and Western GOA from July 1 through July 31. Also, CVs may not participate in directed fishing for arrowtooth flounder, deep-water flatfish, and rex sole in the GOA from July 1 through July 31 (§ 679.82(d)(3)–(4)).

C/Ps participating in Rockfish Program cooperatives are restricted by rockfish and halibut PSC sideboard limits. These C/Ps are prohibited from directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat District and Western GOA from July 1 through July 31 (§ 679.82(e)(2)). Holders of C/P-designated LLP licenses that opt out of participating in a Rockfish Program cooperative will be able to access that portion of each rockfish sideboard limit that is not assigned to rockfish cooperatives (§ 679.82(e)(3) and (e)(7)). The sideboard ratio for each fishery in the West Yakutat District and the Western GOA is set forth in § 679.82(e)(4). Tables 23 and 24 list the final 2018 and 2019 Rockfish Program C/P sideboard limits in the West Yakutat District and the Western GOA. Due to confidentiality requirements associated with fisheries data, the sideboard limits for the West Yakutat District are not displayed.

Table 23. Final 2018 Rockfish Program Sideboard Limits for the Western GOA and West Yakutat District by Fishery for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).

Area	Fishery	C/P sector (% of TAC)	Final 2018 TACs	Final 2018 C/P limit
Western GOA	Dusky rockfish	72.3	146	106
	Pacific ocean perch	50.6	3,312	1,676
	Northern rockfish	74.3	420	312
West Yakutat District	Dusky rockfish	Confidential ¹	232	Confidential ¹
	Pacific ocean perch	Confidential ¹	3,371	Confidential ¹

¹ Not released due to confidentiality requirements associated with fish ticket data, as established by NMFS and the State of Alaska.

Table 24. Final 2019 Rockfish Program Sideboard Limits for the Western GOA and West Yakutat District GOA by Fishery for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).

Area	Fishery	C/P sector (% of TAC)	Final 2019 TACs	Final 2019 C/P limit
Western GOA	Dusky rockfish	72.3	135	98
	Pacific ocean perch	50.6	3,240	1,639
	Northern rockfish	74.3	382	284
West Yakutat District	Dusky rockfish	Confidential ¹	215	Confidential ¹
	Pacific ocean perch	Confidential ¹	3,298	Confidential ¹

¹ Not released due to confidentiality requirements associated with fish ticket data, as established by NMFS and the State of Alaska.

Under the Rockfish Program, the C/P sector is subject to halibut PSC sideboard limits for the trawl deep-water and shallow-water species fisheries from July 1 through July 31 (§ 679.82(e)(3) and (e)(5)). Halibut PSC sideboard ratios by fishery are set forth in § 679.82(e)(5). No halibut PSC sideboard limits apply to the CV sector, as vessels participating in cooperatives receive a portion of the annual halibut PSC limit. C/Ps that opt out of the Rockfish Program are able to access that portion of the deep-water and shallow-water halibut PSC sideboard limit not assigned to C/P rockfish cooperatives. The sideboard provisions for C/Ps that elect to opt out of participating in a rockfish cooperative are described in § 679.82(c), (e), and (f). Sideboard limits are linked to the catch history of specific vessels that may choose to opt out. After March 1, NMFS will determine which C/Ps have opted-out of the Rockfish Program in 2018, and NMFS will know the ratios and amounts used to calculate opt-out sideboard ratios. NMFS will then calculate any applicable opt-out sideboards and post these limits on the Alaska Region Web site at <http://alaskafisheries.noaa.gov/sustainablefisheries/rockfish/>. Table 25 lists the final 2018 and 2019 Rockfish Program halibut PSC limits for the C/P sector.

Table 25. Final 2018 and 2019 Rockfish Program Halibut PSC Limits for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).

Sector	Shallow-water species fishery halibut PSC sideboard ratio (percent)	Deep-water species fishery halibut PSC sideboard ratio (percent)	2018 and 2019 halibut mortality limit (mt)	Annual shallow-water species fishery halibut PSC sideboard limit (mt)	Annual deep-water species fishery halibut PSC sideboard limit (mt)
Catcher/processor	0.10	2.50	1,706	2	43

Amendment 80 Program Groundfish and PSC Sideboard Limits

Amendment 80 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (Amendment 80 Program) established a limited access privilege program for the non-AFA trawl C/P sector. The Amendment 80 Program established groundfish and halibut PSC catch limits for Amendment 80 Program participants to limit the ability of participants eligible for the Amendment 80 Program to expand their harvest efforts in the GOA.

Section 679.92 establishes groundfish harvesting sideboard limits on all Amendment 80 program vessels, other than the F/V *Golden Fleece*, to amounts no greater than the limits listed in Table 37 to 50 CFR part 679. Under § 679.92(d), the F/V *Golden Fleece* is prohibited from directed fishing for pollock, Pacific cod, Pacific ocean perch, dusky rockfish, and northern rockfish in the GOA.

Groundfish sideboard limits for Amendment 80 Program vessels operating in the GOA are based on their average aggregate harvests from 1998 through 2004 (72 FR 52668, September 14, 2007). Tables 26 and 27 list the final 2018 and 2019 groundfish sideboard limits for Amendment 80 Program vessels. NMFS will deduct all targeted or incidental catch of sideboard species made by Amendment 80 Program vessels from the sideboard limits in Tables 26 and 27.

Table 26. Final 2018 GOA Groundfish Sideboard Limits for Amendment 80 Program Vessels (Values are rounded to nearest metric ton).

Species	Apportionments and allocations by season	Area	Ratio of Amendment 80 sector vessels 1998 - 2004 catch to TAC	2018 TAC (mt)	2018 Amendment 80 vessel sideboards (mt)
Pollock	A Season January 20 - March 10	Shumagin (610)	0.003	1,317	4
		Chirikof (620)	0.002	27,314	55
		Kodiak (630)	0.002	9,025	18
	B Season March 10 - May 31	Shumagin (610)	0.003	1,317	4
		Chirikof (620)	0.002	32,155	64
		Kodiak (630)	0.002	4,184	8
	C Season August 25 - October 1	Shumagin (610)	0.003	13,777	41
		Chirikof (620)	0.002	10,013	20
		Kodiak (630)	0.002	13,865	28
	D Season October 1 - November 1	Shumagin (610)	0.003	13,777	41
		Chirikof (620)	0.002	10,013	20
		Kodiak (630)	0.002	13,865	28
	Annual	WYK (640)	0.002	6,833	14
Pacific cod	A Season ¹ January 1 - June 10	W	0.020	3,394	68
		C	0.044	3,653	161
	B Season ² September 1 - December 31	W	0.020	2,263	45
		C	0.044	2,436	107
	Annual	WYK	0.034	1,350	46
Pacific ocean perch	Annual	W	0.994	3,312	3,292
		WYK	0.961	3,371	3,240
Northern rockfish	Annual	W	1.000	420	420
Dusky rockfish	Annual	W	0.764	146	112
		WYK	0.896	232	208

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for trawl gear closes November 1.

Table 27. Final 2019 GOA Groundfish Sideboard Limits for Amendment 80 Program Vessels (Values are rounded to nearest metric ton).

Species	Apportionments and allocations by season	Area	Ratio of Amendment 80 sector vessels 1998 - 2004 catch to TAC	2019 TAC (mt)	2019 Amendment 80 vessel sideboards (mt)
Pollock	A Season January 20 - March 10	Shumagin (610)	0.003	869	3
		Chirikof (620)	0.002	18,025	36
		Kodiak (630)	0.002	5,955	12
	B Season March 10 - May 31	Shumagin (610)	0.003	869	3
		Chirikof (620)	0.002	21,219	42
		Kodiak (630)	0.002	2,761	6
	C Season August 25 - October 1	Shumagin (610)	0.003	9,091	27
		Chirikof (620)	0.002	6,608	13
		Kodiak (630)	0.002	9,150	18
	D Season October 1 - November 1	Shumagin (610)	0.003	9,091	27
		Chirikof (620)	0.002	6,608	13
		Kodiak (630)	0.002	9,150	18
	Annual	WYK (640)	0.002	4,509	9
Pacific cod	A Season ¹ January 1 - June 10	W	0.020	3,206	64
		C	0.044	3,450	152
	B Season ² September 1 - December 31	W	0.020	2,137	43
		C	0.044	2,300	101
	Annual	WYK	0.034	1,275	43
Pacific ocean perch	Annual	W	0.994	3,240	3,221
		WYK	0.961	3,298	3,169
Northern rockfish	Annual	W	1.000	382	382
Dusky rockfish	Annual	W	0.764	135	103
		WYK	0.896	215	193

¹ The Pacific cod A season for trawl gear does not open until January 20.

² The Pacific cod B season for trawl gear closes November 1.

The halibut PSC sideboard limits for Amendment 80 Program vessels in the GOA are based on the historic use of halibut PSC by Amendment 80 Program vessels in each PSC target category from 1998 through 2004. These values are slightly lower than the average historic use to accommodate two factors: allocation of halibut PSC cooperative quota under the Rockfish Program and the exemption of the F/V *Golden Fleece* from this restriction (§ 679.92(b)(2)).

Table 28 lists the final 2018 and 2019 halibut PSC limits for Amendment 80 Program vessels.

These tables incorporate the maximum percentages of the halibut PSC sideboard limits that may be used by Amendment 80 Program vessels as contained in Table 38 to 50 CFR part 679. Any residual amount of a seasonal Amendment 80 sideboard halibut PSC limit may carry forward to the next season limit (§ 679.92(b)(2)).

Table 28. Final 2018 and 2019 Halibut PSC Limits for Amendment 80 Program Vessels in the GOA (Values are rounded to nearest metric ton).

the GOM (values are rounded to nearest whole ton).

Season	Season dates	Target fishery	Historic Amendment 80 use of the annual halibut PSC limit catch (ratio)	2018 and 2019 annual PSC limit (mt)	2018 and 2019 Amendment 80 vessel PSC limit
1	January 20 - April 1	shallow-water	0.0048	1,706	8
		deep-water	0.0115	1,706	20
2	April 1 - July 1	shallow-water	0.0189	1,706	32
		deep-water	0.1072	1,706	183
3	July 1 - September 1	shallow-water	0.0146	1,706	25
		deep-water	0.0521	1,706	89
4	September 1 - October 1	shallow-water	0.0074	1,706	13
		deep-water	0.0014	1,706	2
5	October 1 - December 31	shallow-water	0.0227	1,706	39
		deep-water	0.0371	1,706	63
				Total:	474

Directed Fishing Closures

Pursuant to § 679.20(d)(1)(i), if the Regional Administrator determines 1) that any allocation or apportionment of a target species or species group allocated or apportioned to a fishery will be reached; or 2) with respect to pollock and Pacific cod, that an allocation or apportionment to an inshore or offshore component or sector allocation will be reached, then the Regional Administrator may establish a directed fishing allowance (DFA) for that species or species group. If the Regional Administrator establishes a DFA and that allowance is or will be reached before the end of the fishing year, NMFS will prohibit directed fishing for that species or species group in the specified GOA subarea, regulatory area, or district (§ 679.20(d)(1)(iii)).

The Regional Administrator has determined that the TACs for the species listed in Table 29 are necessary to account for the incidental catch of these species in other anticipated groundfish fisheries for the 2018 and 2019 fishing years.

Table 29. 2018 and 2019 Directed Fishing Closures in the GOA (Amounts for incidental catch in other directed fisheries are in metric tons).

Target	Area/component/gear	Incidental catch amount and year (if amounts differ by year)
Pollock	all/offshore	not applicable ¹
Sablefish ²	all/trawl	1,581 (2018) 2,225 (2019)
Pacific cod	Western, catcher/processor, trawl Central, catcher/processor, trawl	134 (2018), 125 (2019) 253 (2018), 239 (2019)
Shortraker rockfish ²	all	864
Rougheye rockfish ²	all	1,444 (2018) 1,427 (2019)
Thornyhead rockfish ²	all	2,038
Other rockfish	all	2,305
Atka mackerel	all	3,000
Big skate	all	2,848
Longnose skate	all	3,572

Other skates	all	1,384
Sharks	all	4,514
Squids	all	1,137
Octopuses	all	975

¹ Pollock is closed to directed fishing in the GOA by the offshore component under § 679.20(a)(6)(i).

² Closures not applicable to participants in cooperatives conducted under the Central GOA Rockfish Program, as cooperatives are prohibited from exceeding their allocations (§ 679.7(n)(6)(viii)).

Consequently, in accordance with § 679.20(d)(1)(i), the Regional Administrator establishes the DFA for the species or species groups listed in Table 29 as zero mt. Therefore, in accordance with § 679.20(d)(1)(iii), NMFS is prohibiting directed fishing for those species, areas, gear types, and components in the GOA listed in Table 29. These closures will remain in effect through 2400 hours, A.l.t., December 31, 2019.

Section 679.64(b)(5) provides for management of AFA CV groundfish harvest limits and PSC bycatch limits using directed fishing closures and PSC closures according to procedures set out at §§ 679.20(d)(1)(iv), 679.21(d)(6), and 679.21(e)(3)(v). The Regional Administrator has determined that, in addition to the closures listed above, many of the non-exempt AFA CV sideboard limits listed in Tables 18 and 19 are necessary as incidental catch to support other anticipated groundfish fisheries for the 2018 and 2019 fishing years. In accordance with § 679.20(d)(1)(iv), the Regional Administrator sets the DFAs for the species and species groups in Table 30 at zero mt. Therefore, in accordance with § 679.20(d)(1)(iii), NMFS is prohibiting directed fishing by non-exempt AFA CVs in the GOA for the species and specified areas listed in Table 30. These closures will remain in effect through 2400 hours, A.l.t., December 31, 2019.

Table 30. 2018 and 2019 Non-Exempt AFA CV Sideboard Directed Fishing Closures for All Gear Types in the GOA (Amounts for incidental catch in other directed fisheries are in metric tons).

Species	Regulatory area/district	Incidental catch amount
Pacific cod	Eastern	10 (inshore) and 9 (offshore) [2018] 1 (inshore) and 1 (offshore) [2019]
Shallow-water flatfish	Eastern	53
Deep-water flatfish	Western	0
Rex sole	Western and Eastern	2 and 10
Arrowtooth flounder	Western and Eastern	30 and 3
Flathead sole	Western and Eastern	31 and 2
Pacific ocean perch	Western	8
Northern rockfish	Western	0
Dusky rockfish	Entire GOA	2
Demersal shelf rockfish	SEO District	1
Sculpins	Entire GOA	33
Squids	Entire GOA	7

Section 680.22 provides for the management of non-AFA crab vessel sideboards using directed fishing closures in accordance with § 680.22(e)(2) and (3). The Regional Administrator has determined that the non-AFA crab vessel sideboards listed in Tables 21 and 22 are insufficient to support a directed fishery and has set the sideboard DFA at zero mt, with the exception of Pacific cod pot CV sector apportionments in the Western and Central Regulatory Areas. Therefore, NMFS is prohibiting directed fishing by non-AFA crab vessels in the GOA for all species and species groups listed in Tables 21 and 22, with the exception of the Pacific cod pot CV sector apportionments in the Western and Central Regulatory Areas.

Closures implemented under the 2017 and 2018 GOA harvest specifications for groundfish (82 FR 12032, February 27, 2017) remain effective under authority of these final

2018 and 2019 harvest specifications and until the date specified in those notices. Closures are posted at the following web site:

<http://alaskafisheries.noaa.gov/infobulletins/search>. While these closures are in effect, the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a fishing trip. These closures to directed fishing are in addition to closures and prohibitions found at 50 CFR part 679. NMFS may implement other closures during the 2018 and 2019 fishing years as necessary for effective conservation and management.

Comments and Responses

NMFS received two letters during the public comment period for the proposed GOA groundfish harvest specifications. No changes were made to the final rule in response to the comment letters received. NMFS' response to public comments on the proposed GOA groundfish harvest specifications is provided below.

Comment 1: The proposed harvest specifications are based on stock assessment information from the 2016 SAFE. That information is not the most up-to-date, and may not be sufficient to support the Council's recommendations for the 2018 and 2019 harvest specifications, as contained in the proposed rule.

Response: NMFS noted in the proposed 2018 and 2019 harvest specifications that, while the proposed specifications were based on information from the 2016 SAFE report, the final 2017 SAFE report would be available to support the Council's recommendations and NMFS' determinations for the final GOA 2018 and 2019 harvest specifications. The final 2017 SAFE report, which contains the most recent GOA groundfish stock assessment information on the biological condition of groundfish stocks as well as other biological and socioeconomic information, became available in November 2017. The Council reviewed the final 2017 SAFE

report during its December 2017 meeting and based its recommendations for appropriate 2018 and 2019 OFLs, ABCs, and TACs on information provided in the final 2017 SAFE report. NMFS also considered the information in the final 2017 SAFE report in adopting the Council's recommendations and in setting the final 2018 and 2019 harvest specifications. The 2017 SAFE is available from the Council (see **ADDRESSES**).

Comment 2: NOAA has done an adequate job protecting baby longnose skates in the Western Regulatory Area of the Gulf of Alaska and should keep doing what it is doing.

Response: NMFS acknowledges this comment.

Classification

NMFS has determined that these final harvest specifications are consistent with the FMP and with the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

This action is authorized under 50 CFR 679.20 and is exempt from review under Executive Order 12866.

NMFS prepared an EIS for this action (see **ADDRESSES**) and made it available to the public on January 12, 2007 (72 FR 1512). On February 13, 2007, NMFS issued the ROD for the EIS. In January 2017, NMFS prepared a SIR for this action. Copies of the EIS, ROD, and SIR for this action are available from NMFS (see **ADDRESSES**). The EIS analyzes the environmental consequences of the groundfish harvest specifications and alternative harvest strategies on resources in the action area. The EIS found no significant environmental consequences of this action and its alternatives. The preferred alternative is a harvest strategy in which TACs are set at a level that falls within the range of ABCs recommended by the Council's SSC; the sum of the TACs must achieve the OY specified in the FMP. The SIR evaluates the

need to prepare a Supplemental EIS (SEIS) for the 2018 and 2019 groundfish harvest specifications.

An SEIS should be prepared if 1) the agency makes substantial changes in the proposed action that are relevant to environmental concerns, or 2) significant new circumstances or information exist relevant to environmental concerns and bearing on the proposed action or its impacts (40 CFR 1502.9(c)(1)). After reviewing the information contained in the SIR and SAFE reports, the Regional Administrator has determined that 1) approval of the 2018 and 2019 harvest specifications, which were set according to the preferred harvest strategy in the EIS, does not constitute a substantial change in the action; and 2) there are no significant new circumstances or information relevant to environmental concerns and bearing on the action or its impacts. Additionally, the 2018 and 2019 harvest specifications will result in environmental impacts within the scope of those analyzed and disclosed in the EIS. Therefore, supplemental National Environmental Policy Act documentation is not necessary to implement the 2018 and 2019 harvest specifications.

Section 604 of the Regulatory Flexibility Act (RFA) (5 U.S.C. 604) requires that, when an agency promulgates a final rule under section 553 of Title 5 of the United States Code, after being required by that section, or any other law, to publish a general notice of proposed rulemaking, the agency shall prepare a final regulatory flexibility analysis (FRFA). The following constitutes the FRFA prepared in the final action.

Section 604 describes the required contents of a FRFA: 1) a statement of the need for, and objectives of, the rule; 2) a statement of the significant issues raised by the public comments in response to the initial regulatory flexibility analysis, a statement of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of

such comments; 3) the response of the agency to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration in response to the proposed rule, and a detailed statement of any change made to the proposed rule in the final rule as a result of the comments; 4) a description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available; 5) a description of the projected reporting, recordkeeping, and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and 6) a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency that affect the impact on small entities was rejected.

A description of this action, its purpose, and its legal basis are contained at the beginning of the preamble to this final rule and are not repeated here.

NMFS published the proposed rule on December 8, 2017 (82 FR 57924). NMFS prepared an Initial Regulatory Flexibility Analysis (IRFA) to accompany this action, and included a summary in the proposed rule. The comment period closed on January 8, 2018. No comments were received on the IRFA or on the economic impacts of the rule more generally. The Chief Counsel for Advocacy of the Small Business Administration did not file any comments on the proposed rule.

The entities directly regulated by this action include: 1) entities operating vessels with groundfish FFPs catching FMP groundfish in Federal waters; 2) all entities operating vessels,

regardless of whether they hold groundfish FFPs, catching FMP groundfish in the State-waters parallel fisheries; and 3) all entities operating vessels fishing for halibut inside three miles of the shore (whether or not they have FFPs).

For RFA purposes only, NMFS has established a small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing (see 50 CFR 200.2). A business primarily engaged in commercial fishing (NAICS code 11411) is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual gross receipts not in excess of \$11 million for all its affiliated operations worldwide.

Based on data from 2016 fishing activity, there were 920 individual catcher vessel entities with gross revenues meeting small entity criteria. Of these entities, 841 used hook-and-line gear, 114 used pot gear, and 31 used trawl gear (some of these entities used more than one gear type, thus the counts of entities using the different gear types do not sum to the total number of entities above). Three individual catcher/processors met the small entity criterion; two used hook-and-line gear, and one used trawl gear. Catcher/processor gross revenues were not reported for confidentiality reasons; however, small hook-and-line entities had average gross revenues of \$340,000, small pot entities had average gross revenues of \$720,000, and small trawl entities had average gross revenues of \$1.83 million.

Some of these vessels are members of AFA inshore pollock cooperatives, of GOA rockfish cooperatives, or of Bering Sea and Aleutian Islands crab rationalization cooperatives, and, therefore, under the RFA it is the aggregate gross receipts of all participating members of the cooperative that must meet the threshold. Vessels that participate in these cooperatives are considered to be large entities within the meaning of the RFA. These relationships are accounted

for, along with corporate affiliations among vessels, to the extent that they are known, in the estimated number of small entities. If affiliations exist of which NMFS is unaware, or if entities had non-fishing revenue sources, the estimates above may overstate the number of directly regulated small entities.

This action does not modify recordkeeping or reporting requirements.

NMFS considered alternative harvest strategies when choosing the preferred harvest strategy (Alternative 2) in December 2006. These included the following:

- Alternative 1: Set TACs to produce fishing mortality rates, F , that are equal to $maxFABC$, unless the sum of the TACs is constrained by the OY established in the fishery management plans. This is equivalent to setting TACs to produce harvest levels equal to the maximum permissible ABCs, as constrained by OY. The term “ $maxFABC$ ” refers to the maximum permissible value of $FABC$ under Amendment 56 to the BSAI and GOA groundfish fishery management plans. Historically, the TAC has been set at or below the ABC; therefore, this alternative represents a likely upper limit for setting the TAC within the OY and ABC limits.
- Alternative 3: For species in Tiers 1, 2, and 3, set TAC to produce F equal to the most recent 5-year average actual F . For species in Tiers 4, 5, and 6, set TAC equal to the most recent 5-year average actual catch. For stocks with a high level of scientific information, TACs would be set to produce harvest levels equal to the most recent 5-year average actual fishing mortality rates. For stocks with insufficient scientific information, TACs would be set equal to the most recent 5-year average actual catch. This alternative recognizes that for some stocks, catches may fall well below ABCs, and recent average F may provide a better indicator of actual F than $FABC$ does.

- Alternative 4: Set TACs for rockfish species in Tier 3 at $F=75\%$; set TACs for rockfish species in Tier 5 at $F=0.5M$; and set spatially explicit TACs for shortraker and rougheye rockfish in the GOA. Second, taking the rockfish TACs as calculated above, reduce all other TACs by a proportion that does not vary across species, so that the sum of all TACs, including rockfish TACs, is equal to the lower bound of the area OY (116,000 mt in the GOA). This alternative sets conservative and spatially explicit TACs for rockfish species that are long-lived and late to mature and sets conservative TACs for the other groundfish species.
- Alternative 5: (No Action) Set TACs at zero.

Alternatives 1, 3, 4, and 5 do not meet the objectives of this action, and although Alternatives 1 and 3 may have a smaller adverse economic impact on small entities than the preferred alternative, Alternatives 4 and 5 would have a significant adverse economic impact on small entities. The Council rejected these alternatives as harvest strategies in 2006, and the Secretary did so in 2007.

Alternative 2 is the preferred alternative chosen by the Council: Set TACs that fall within the range of ABCs recommended through the Council harvest specifications process and TACs recommended by the Council. Under this scenario, F is set equal to a constant fraction of $maxFABC$. The recommended fractions of $maxFABC$ may vary among species or stocks, based on other considerations unique to each. This is the method for determining TACs that has been used in the past.

Alternative 2 selected harvest rates that will allow fishermen to harvest stocks at the level of ABCs, unless total harvests are constrained by the upper bound of the GOA OY of 800,000 mt. The sums of ABCs in 2018 and 2019 are 536,921 mt and 480,187 mt, respectively. The sums

of the TACs in 2018 and 2019 are 427,512 mt and 376,417 mt, respectively. Thus, although the sum of ABCs in each year is less than 800,000 mt, the sums of the TACs in each year are less than the sums of the ABCs.

In most cases, the Council has set TACs equal to ABCs. The divergence between aggregate TACs and aggregate ABCs reflects a variety of special species- and fishery-specific circumstances:

- Pacific cod TACs are set equal to 70 percent in the Western GOA and 75 percent in the Central and Eastern GOA of the Pacific cod ABCs in each year to account for the GHL set by the State for its GHL Pacific cod fisheries (30 percent of the Western GOA ABC and 25 percent of the Central and Eastern GOA ABCs). Thus, the difference between the Federal TACs and ABCs does not actually reflect a Pacific cod harvest below the Pacific cod ABC, as the balance is available for the State's cod GHL fisheries.
- Shallow-water flatfish and flathead sole TACs are set below ABCs in the Western Regulatory Area. Arrowtooth flounder TACs are set below ABC in all GOA regulatory areas. Catches of these flatfish species rarely, if ever, approach the proposed ABCs or TACs. Important trawl fisheries in the GOA take halibut PSC, and are constrained by limits on the allowable halibut PSC mortality. These limits may force the closure of trawl fisheries before they have harvested the available groundfish ABC. Thus, actual harvests of groundfish in the GOA routinely fall short of some ABCs and TACs. Markets can also constrain harvests below the TACs, as has been the case with arrowtooth flounder, in the past. These TACs are set to allow for increased harvest opportunities for these targets while conserving the halibut PSC limit for use in other, more fully utilized fisheries.

- The other rockfish TAC is set below the ABC in the Southeast Outside District based on several factors. In addition to conservation concerns for the rockfish species in this group, there is a regulatory prohibition against using trawl gear east of 140° W. longitude. Because most species of other rockfish are caught exclusively with trawl gear, the catch of such species with other gear types, such as hook-and-line, is low. The commercial catch of other rockfish in the Eastern Regulatory Area, which includes the West Yakutat and Southeast Outside Districts, has ranged from approximately 70 mt to 248 mt per year over the last decade.
- The GOA-wide Atka mackerel TAC is set below the ABC. The estimates of survey biomass continue to be unreliable in the GOA. Therefore, the Council recommended and NMFS agrees that the Atka mackerel TAC in the GOA be set at an amount to support incidental catch in other directed fisheries.

Alternative 1 selects harvest rates that would allow fishermen to harvest stocks at the level of the ABCs, unless total harvests were constrained by the upper bound of the GOA OY of 800,000 mt. Although Alternative 1 may be consistent with the preferred alternative (Alternative 2), meet the objectives of the action, and have small entity impacts equivalent to the preferred alternative, it is not likely that Alternative 1 would result in reduced adverse economic impacts to directly-regulated small entities relative to Alternative 2. The selection of Alternative 1, which could increase all TACs up to the sum of ABCs, would not reflect the practical implications that increased TACs for some species probably would not be fully harvested. This could be due to a variety of reasons, which are addressed in the preamble to this rule and are summarized briefly here. There may be a lack of commercial or market interest in some species. Additionally, an underharvest of flatfish TACs could result due to constraints such as the fixed, and therefore

constraining, PSC limits associated with the harvest of the GOA groundfish species.

Furthermore, TACs may be set lower than ABC for conservation purposes, as is the case with other rockfish in the Eastern GOA. Finally, the TACs for two species (pollock and Pacific cod) cannot be set equal to ABC, as the TAC must be reduced to account for the State of Alaska's guideline harvest levels in these fisheries.

Alternative 3 selects harvest rates based on the most recent 5 years of harvest rates (for species in Tiers 1 through 3) or based on the most recent 5 years of harvests (for species in Tiers 4 through 6). This alternative is inconsistent with the objectives of this action because it does not take account of the most recent biological information for this fishery. NMFS annually conducts at-sea surveys for different species, as well as statistical modeling, to estimate stock sizes and permissible harvest levels. Actual harvest rates or harvest amounts are a component of these estimates, but in and of themselves may not accurately portray stock sizes and conditions. Harvest rates are listed for each species or species group for each year in the SAFE report (see **ADDRESSES**).

Alternative 4 would lead to significantly lower harvests of all species to reduce TACs from the upper end of the OY range in the GOA to its lower end of 116,000 mt. Overall, this alternative would reduce 2018 TACs by about 69 percent. This would lead to significant reductions in harvests of species by small entities. While production declines in the GOA likely would be associated with offsetting price increases in the GOA, the size of these increases is very uncertain. Price increases would still be constrained by the availability of substitutes, and there are close substitutes for GOA groundfish species available in significant quantities from the Bering Sea and Aleutian Islands management area. In addition, price increases are very unlikely

to offset revenue declines from smaller production. Thus, this action would have a detrimental economic impact on small entities.

Alternative 5, which sets all harvests equal to zero, may also address conservation issues, but would have a significant adverse economic impact on small entities.

Impacts on marine mammals resulting from fishing activities conducted under this rule are discussed in the EIS and SIR (see **ADDRESSES**).

Pursuant to 5 U.S.C. 553(d)(3), the Assistant Administrator for Fisheries, NOAA, finds good cause to waive the 30-day delay in effectiveness for this rule because delaying this rule would be contrary to the public interest. The Plan Team review occurred in November 2017, and the Council considered and recommended the final harvest specifications in December 2017. Accordingly, NMFS' review could not begin until after the December 2017 Council meeting, and after the public had time to comment on the proposed action. For all fisheries not currently closed because the TACs established under the final 2017 and 2018 harvest specifications (82 FR 12032, February 27, 2017) were not reached, it is possible that they would be closed prior to the expiration of a 30-day delayed effectiveness period because their TACs could be reached within that period. If implemented immediately, this rule would allow these fisheries to continue fishing because some of the new TACs implemented by this rule are higher than the TACs under which they are currently fishing.

In addition, immediate effectiveness of this action is required to provide consistent management and conservation of fishery resources based on the best available scientific information. This is particularly pertinent for those species that have lower 2018 ABCs and TACs than those established in the 2017 and 2018 harvest specifications (82 FR 12032, February 27, 2017). If implemented immediately, this rule would ensure that NMFS can properly manage

those fisheries for which this rule sets lower 2018 ABCs and TACs, which are based on the most recent biological information on the condition of stocks, rather than managing species under the higher TACs set in the previous year's harvest specifications.

Certain fisheries, such as those for pollock and Pacific cod, are intensive, fast-paced fisheries. Other fisheries, such as those for sablefish, flatfish, rockfish, Atka mackerel, skates, sculpins, sharks, squids, and octopuses, are critical as directed fisheries and as incidental catch in other fisheries. U.S. fishing vessels have demonstrated the capacity to catch the TAC allocations in many of these fisheries. If this rule allowed for a 30-day delay in effectiveness and if a TAC were reached during those 30 days, NMFS would close directed fishing or prohibit retention for the applicable species. Any delay in allocating the final TACs in these fisheries would cause confusion to the industry and potential economic harm through unnecessary discards, thus undermining the intent of this rule. Waiving the 30-day delay allows NMFS to prevent economic loss to fishermen that could otherwise occur should the 2018 TACs (set under the 2017 and 2018 harvest specifications) be reached. Determining which fisheries may close is impossible because these fisheries are affected by several factors that cannot be predicted in advance, including fishing effort, weather, movement of fishery stocks, and market price. Furthermore, the closure of one fishery has a cascading effect on other fisheries by freeing-up fishing vessels, allowing them to move from closed fisheries to open ones, increasing the fishing capacity in those open fisheries, and causing them to close at an accelerated pace.

In fisheries subject to declining sideboard limits, a failure to implement the updated sideboard limits before initial season's end could deny the intended economic protection to the non-sideboarded sectors. Conversely, in fisheries with increasing sideboard limits, economic benefit could be denied to the sideboard-limited sectors.

If the final harvest specifications are not effective by March 24, 2018, which is the start of the 2018 Pacific halibut season as specified by the IPHC, the hook-and-line sablefish fishery will not begin concurrently with the Pacific halibut IFQ season. This would result in confusion for the industry and economic harm from unnecessary discard of sablefish that are caught along with Pacific halibut, as both hook-and-line sablefish and Pacific halibut are managed under the same IFQ program. Immediate effectiveness of the final 2018 and 2019 harvest specifications will allow the sablefish IFQ fishery to begin concurrently with the Pacific halibut IFQ season.

Finally, immediate effectiveness also would provide the fishing industry the earliest possible opportunity to plan and conduct its fishing operations with respect to new information about TACs. Therefore, NMFS finds good cause to waive the 30-day delay in effectiveness under 5 U.S.C. 553(d)(3).

Small Entity Compliance Guide

This final rule is a plain language guide to assist small entities in complying with this final rule as required by the Small Business Regulatory Enforcement Fairness Act of 1996. This final rule's primary purpose is to announce the final 2018 and 2019 harvest specifications and prohibited species bycatch allowances for the groundfish fisheries of the GOA. This action is necessary to establish harvest limits and associated management measures for groundfish during the 2018 and 2019 fishing years, and to accomplish the goals and objectives of the FMP. This action affects all fishermen who participate in the GOA fisheries. The specific OFL, ABC, TAC, and PSC amounts are provided in tables to assist the reader. NMFS will announce closures of directed fishing in the *Federal Register* and information bulletins released by the Alaska Region. Affected fishermen should keep themselves informed of such closures.

Authority: 16 U.S.C. 773 *et seq.*; 16 U.S.C. 1540 (f), 1801 *et seq.*; 16 U.S.C. 3631 *et seq.*; Pub. L. 105-277; Pub. L. 106-31; Pub. L. 106-554; Pub. L. 108-199; Pub. L. 108-447; Pub. L. 109-241; Pub. L 109-479.

Dated: February 23, 2018.

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